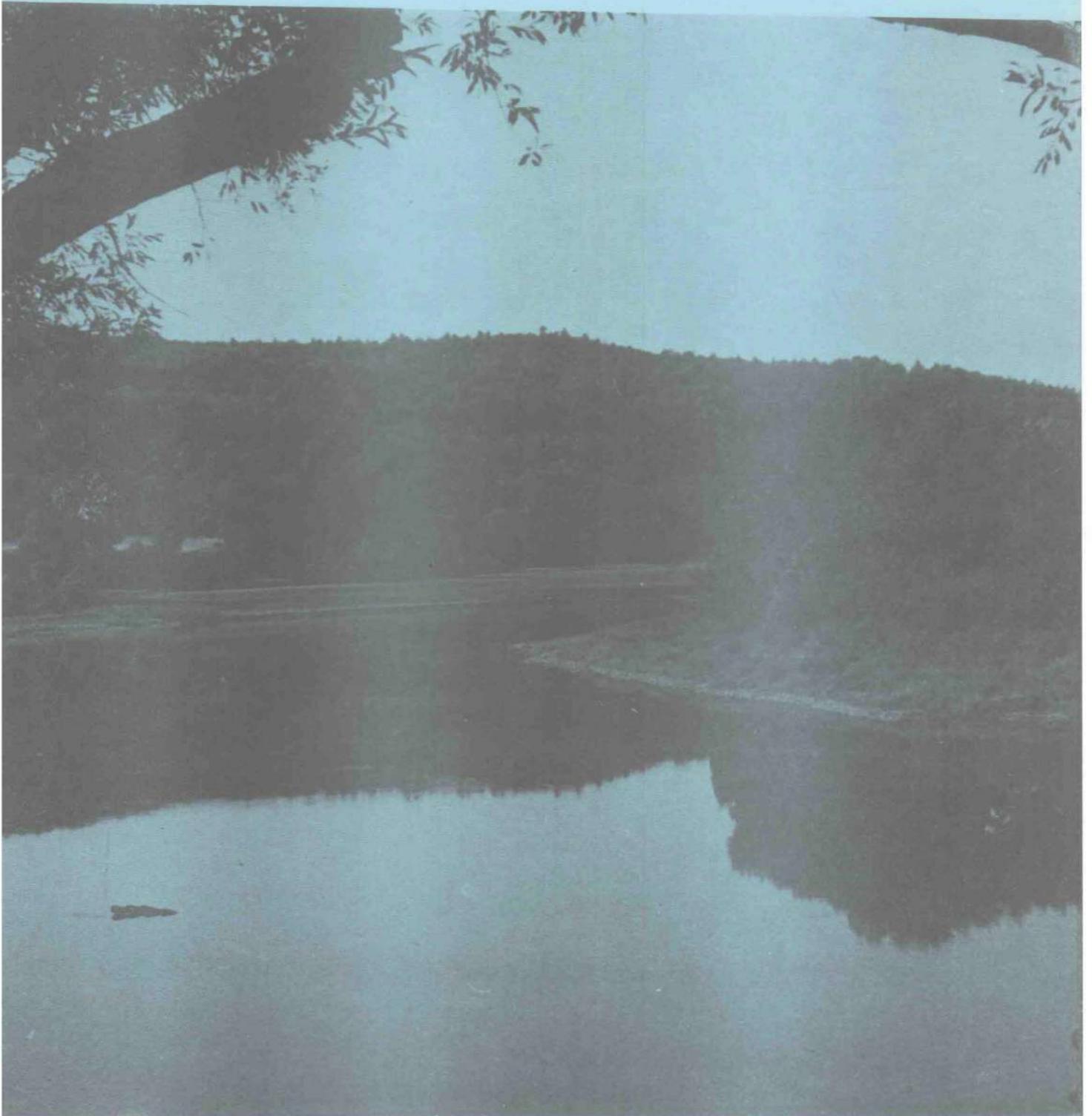


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**THE UPPER DELAWARE RIVER**  
A WILD AND SCENIC RIVER STUDY



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.



U. S. DEPARTMENT OF THE INTERIOR  
Thomas S. Kleppe, Secretary

Bureau of Outdoor Recreation  
John Crutcher, Director

647/D-33

**THE UPPER DELAWARE RIVER**  
**A WILD AND SCENIC RIVER STUDY**

**July 1976**

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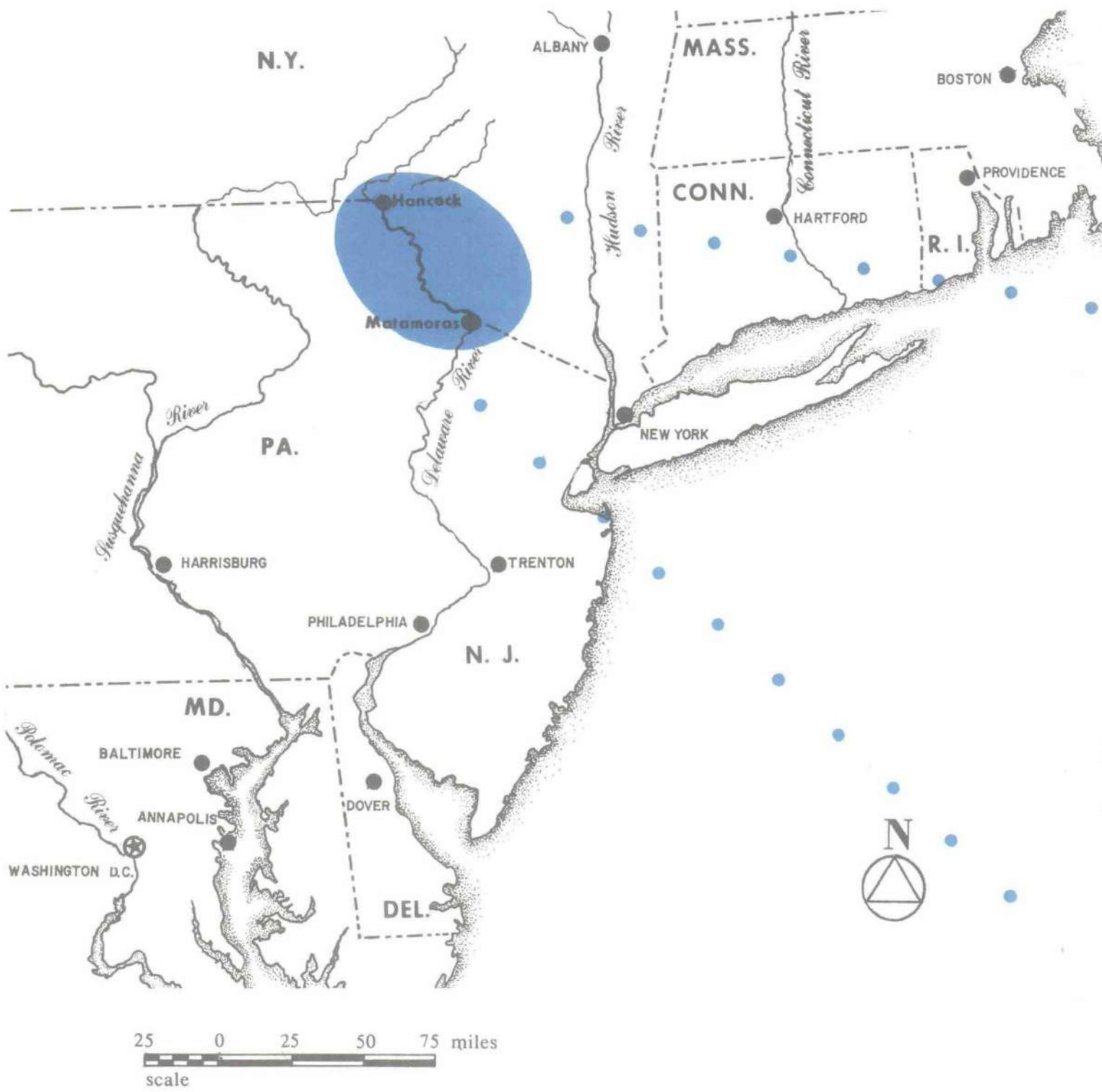
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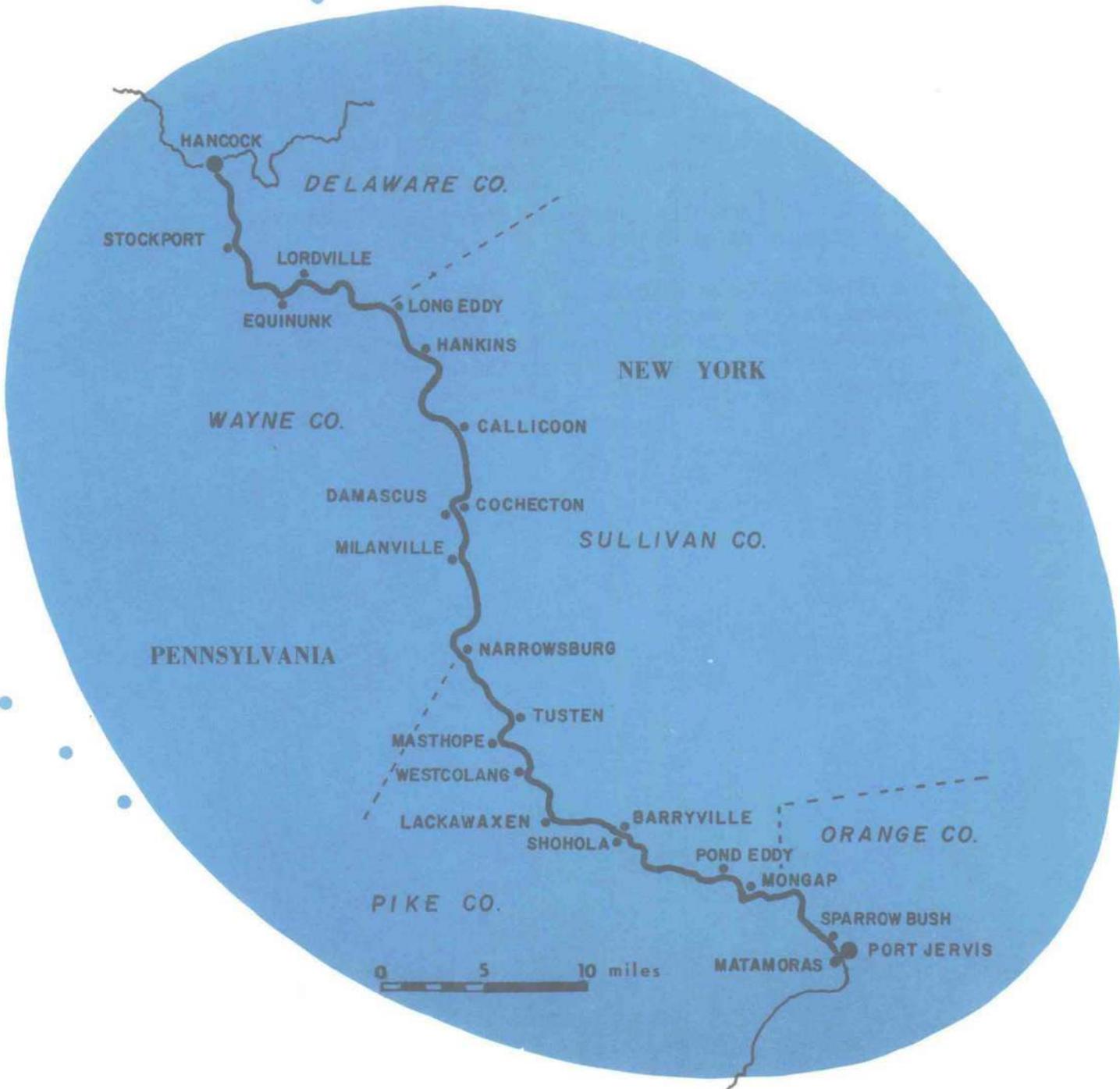
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MAP 1

**THE UPPER DELAWARE  
LOCATION MAP**



## **SUMMARY**

### **FINDINGS**

It has been found that:

- the segment of the Delaware River from the confluence of the East and West Branches downstream from Hancock, New York to the upstream corporate limits of Matamoras, Pennsylvania qualifies as a component of the National Wild and Scenic Rivers System.
- the river qualifies as scenic and recreational and should be classified as shown on Map 7.
- the river can be protected and managed with minimum public investment and the least disruption of the area through the development and implementation of land use controls by the Delaware River Basin Commission, the States of New York and Pennsylvania, and local units of government.

## RECOMMENDATIONS

It is recommended that Congress designate the segment of the Delaware River from near Hancock, New York, to the upstream corporate limits of Matamoras, Pennsylvania, as the Delaware National Scenic and Recreational River in the National Wild and Scenic Rivers System. The designation to be effective upon publication of notice in the Federal Register by the Secretary of the Interior that adequate land use protection measures have been implemented in the river corridor to preserve the values associated with the river's classification. At that time, the Secretary would authorize the National Park Service to initiate its acquisition program and master planning activities.

It is further recommended that:

- the planning and management of this component of the National Wild and Scenic Rivers System be a cooperative endeavor by Federal, State, Interstate, local and private interests.
- the National Park Service be assigned primary responsibility for management of recreation on the designated segment of the river and leadership in the development, within one year of the effective date of the designation, of a master plan outlining the acquisition, development, and maintenance program for recreation management.
- the river corridor be protected through land use controls of approximately 75,000 acres from ridgeline to ridgeline. Land use controls should take into account legitimate growth needs of the riverfront communities.
- the river be classified as shown on Map 7.
- the concept of nodal recreation management be adopted. After the effective date of designation, the initial Federal acquisition will not exceed 450 acres of land with possible fee title acquisition of up to additional 1,000 acres of land with the concurrence of the advisory council proposed below. The initial acquisition will consist of the 20 existing recreation areas along the river and land for two information centers at the termini. Additional acquisition would be parcels having unique scenic or historical/ archeological significance and future recreation needs.
- the Governors of New York and Pennsylvania, jointly or through the Delaware River Basin Commission, and with the cooperation of local governments, take the lead in developing and implementing necessary land use control measures including adoption of flood plain and other zoning, building codes standards for plant siting, utility rights-of-way, water and sewer line permits, etc., to assure

(1) preservation of the existing environmental values in the river corridor, and (2) that permitted development within the corridor is compatible with designation of the river as a scenic and recreational river.

-- an Upper Delaware Citizen's Advisory Council be established to stimulate maximum public involvement in the development of land use controls and recreation management.

-- water pollution abatement efforts be accelerated.

-- releases from upstream reservoirs be scheduled to assist in maintaining water quality, the existing cold water fishery, and adequate boating conditions. A minimum of 1,000 c.f.s. should be maintained at Hancock, New York, in order to provide a satisfactory boating experience.

#### COSTS

##### Five-year Cost Estimates ('75\$)

*Land Acquisition	\$1,000,000
Development of Facilities	1,600,000
Operation and Maintenance	700,000
Development of Land Use Control Measures	<u>500,000</u>
Total	\$3,800,000

\*The National Park Service is authorized to acquire up to 1,000 additional acres at an estimated cost of \$2 million, which must be approved by the Upper Delaware Citizens Advisory Council.

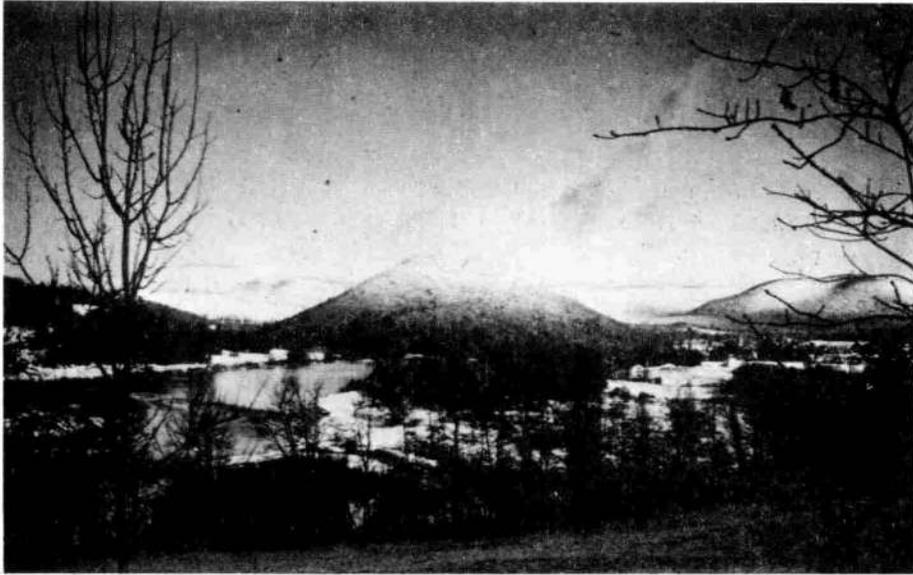
**THE UPPER DELAWARE**  
PROTECTION BOUNDARY AND RIVER RECREATION SITES



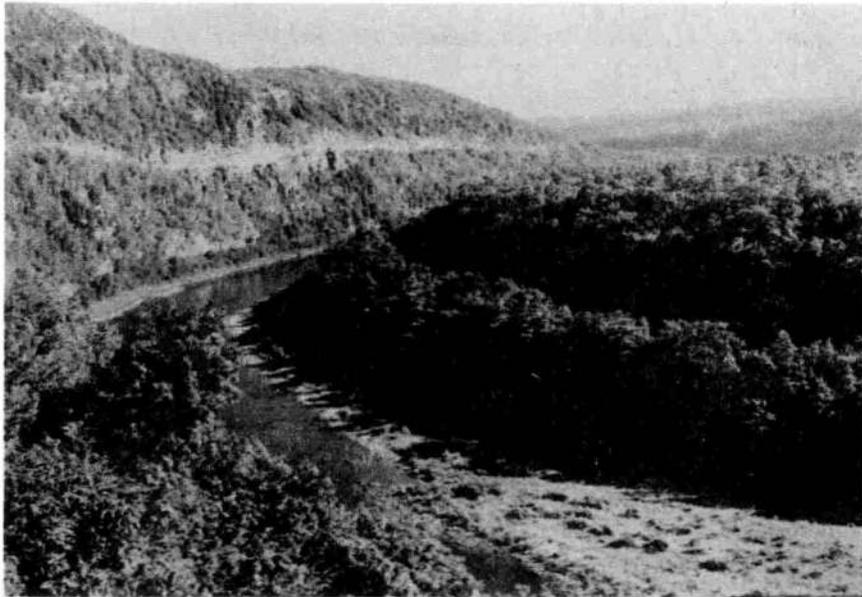
NEW YORK

PENNSYLVANIA

# INTRODUCTION



POINT MOUNTAIN



HAWKS NEST ESCARPMENT

## I. INTRODUCTION

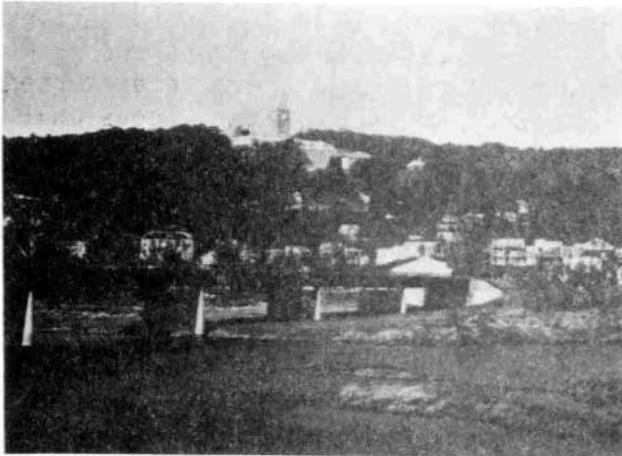
This report, on the scenic and recreational qualities of the Upper Delaware River in New York and Pennsylvania, was prepared under authority of the National Wild and Scenic Rivers Act of 1968, Public Law 90-542. In the Act, the Congress declared it

...to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

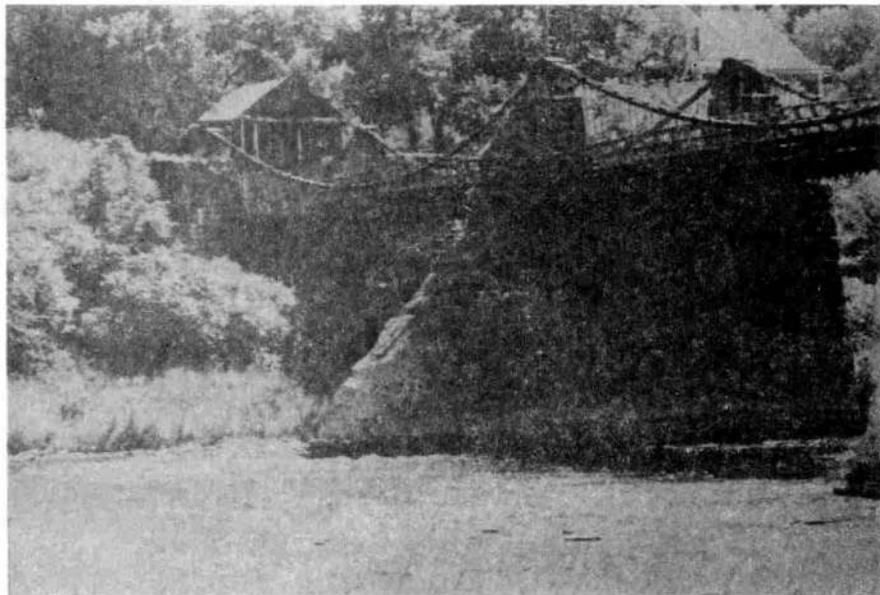
The Act established a National Wild and Scenic Rivers System by designating eight initial rivers. In addition, the Act identified 27 other rivers as potential additions to the system and more recently, 29 others were added to this category. The Upper Delaware River, a 75-mile segment from Hancock, New York to Matamoras, Pennsylvania, is one of the original 27 rivers designated for study. The Bureau of Outdoor Recreation (Chairman) has led this study on behalf of the Department of the Interior. The report was prepared through the combined efforts of an Interagency Field Task Force composed of the National Park Service, Fish and Wildlife Service, U.S. Forest Service, Environmental Protection Agency, Army Corps of Engineers, New York State Department of Environmental Conservation, Pennsylvania Department of Environmental Resources, and the Delaware River Basin Commission. The New Jersey Department of Environmental Protection, Tocks Island Regional Advisory Council, and Water Resources Association of the Delaware River Basin acted in the capacity of observers during the study effort.

Public information meetings were held in Matamoras, Pennsylvania and Callicoon, New York on May 20-21, 1970 and again on July 24-25, 1973. The meetings were conducted to promote an understanding of the Upper Delaware Wild and Scenic River Study and to obtain public assistance in developing recommendations.

# THE ENVIRONMENT



COMMUNITY ALONG THE UPPER DELAWARE



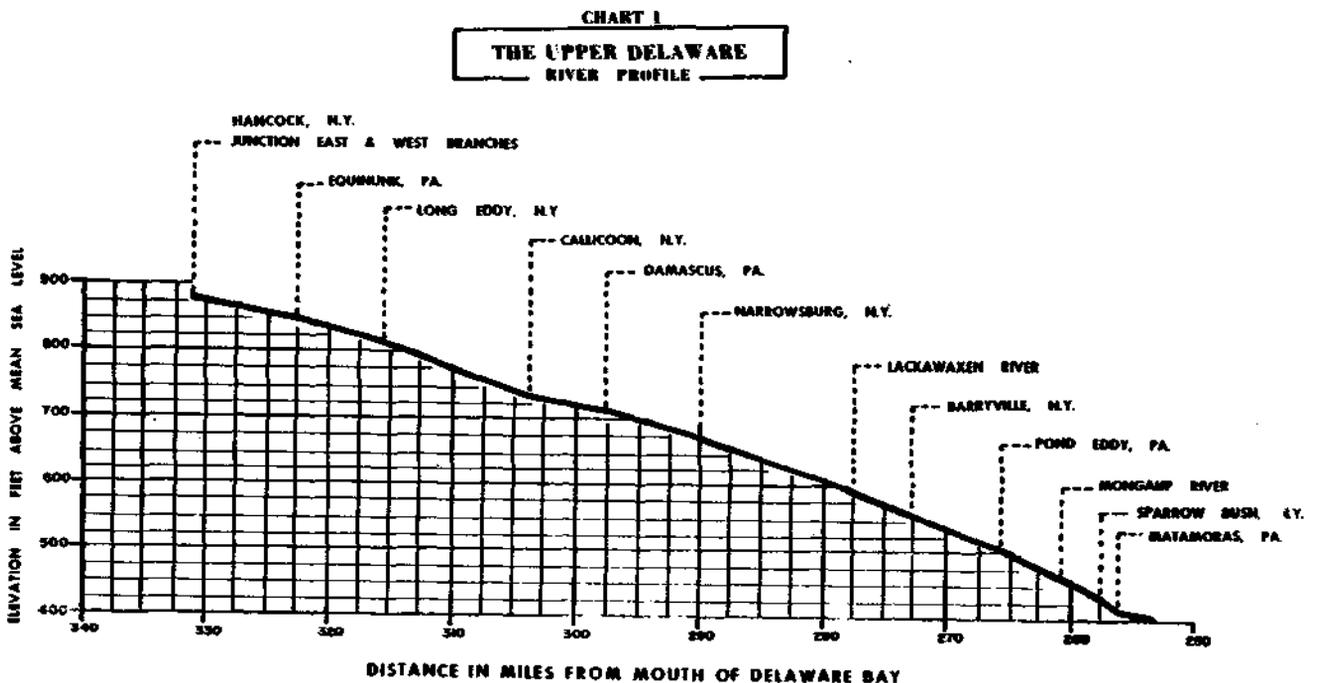
ROEBLING BRIDGE

## II. THE ENVIRONMENT

### Physical Environment

The origin of the Delaware River is in the hemlock-forested Catskill Mountains of New York. The East and West Branches flow southwesterly and converge at Point Mountain near Hancock to form the main stem. From Hancock, the Delaware flows generally in a southeasterly direction through a scenic valley between the Catskill Mountains and the Pocono Uplands, and forms the boundary between New York and Pennsylvania. Wayne and Pike Counties in Pennsylvania and the New York counties of Orange, Sullivan, and Delaware border this segment of the river. Principal tributaries include Equinunk Creek, Basket Creek, Callicoon Creek, Lackawaxen River, Shohola Creek, Mongaup River, and the Neversink River. Nearly the entire area is well-forested with deciduous and evergreen type vegetation. Scattered small settlements are interspersed among woodlands and the fields and pastures of small farms. Occasional light industrial development is visible along the banks in the vicinity of the towns and villages.

The area's rolling and sometimes rugged hills have elevations that vary from 500 to 2,000 feet above mean sea level. Local relief exceeds 700 feet in a few locations. River width varies from 150 to 1,500 feet, but is most commonly 300-500 feet wide and from 2-8 feet deep, which is generally too shallow for power boats, but adequate for small boats and canoes. There are a few short stretches with depths from 17-22 feet. At Pond Eddy there is a pool 45 feet deep and at Narrowsburg there is one 113 feet deep. While the average gradient is six feet per mile, there are some two-mile stretches where the drop ranges from 13 to 30 feet per mile, creating white water rapids during periods of medium to high water levels (see Chart 1).



Along the river banks and on the islands, sycamore, soft maples, basswood, elm, ash, cottonwood, and a variety of willows are abundant. Shrubs include alder, spicebush, sumac, buttonbush, and elderberry. At higher elevations, there is a mixture of oak, hickory, beach, birch, sugar maple, tulip tree, locust, hemlock, and pine. The evergreen thickets of rhododendron and mountain laurel are conspicuous in the understory along the moist slopes of ravines. Ferns are abundant along the river banks and in rocky outcroppings. The forest floor's wild flowers include purple loosestrife, day-lily, may-apple, Indian pipe, wild bergamot, monkey flower, pickerelweed, Solomon's seal, rattlesnake plantain, water lily, wild rose, Oswego tea, wood mint, and cardinal flower.

The climate of the area provides "four seasons" of outdoor recreation. The winter is cold enough to retain a snow cover, and in the summer, daytime temperatures are usually in the 70's and low 80's.

### Archeology and History

Various cultures are believed to have passed through the area during the past 10,000 years. Before the coming of the Europeans, the Lenni Lenape Indians lived and hunted in the Delaware River region. Evidence of their rock shelters, campsites, villages, and burial places have been identified at scattered locations along both river banks. Important archeological sites are in the vicinity of Hancock, Equinunk, Cohecton, Narrowsburg, and Lackawaxen.

Until the end of the Revolutionary War, the Upper Delaware River area was frontier territory. Friction between Indians and settlers increased and led the pioneers to build log forts similar to the reconstructed Fort Delaware at Narrowsburg, New York.

Early settlers recognized the value of the timber on the white pine-covered hills. In 1764, Daniel Skinner rafted the first logs down the Delaware from Skinners Falls to Philadelphia. The loggers found ready markets in the settlements along the lower Delaware and in the development of the shipbuilding industry. Rafting reached its height in the 1840's; by 1885 it began to decline as the supply of white pine was gradually exhausted. An increasing use of hemlock, however, enabled runs to continue until 1907.

The Delaware and Hudson Canal extended 108 miles from Honesdale, Pennsylvania, to the Hudson River at Kingston, New York. Commercial use of the Canal began in 1828 with the first boat carrying ten tons of coal. At first the coal was hauled to the canal by horse-drawn wagons and sleds from mines near Carbondale. In 1829, however, a gravity railroad was constructed from the coal fields to the canal. Locomotive use in America began on this gravity line with introduction of the Stourbridge Lion. To improve an unsatisfactory crossing, construction of aqueducts across the Delaware and Lackawaxen Rivers

was authorized in 1846. Designed by John A. Roebling, whose later projects included the Brooklyn Bridge, they were the first to use suspension hangers of wire rope. Operation of the canal continued until 1898 when use was suspended due to competitive pressures from the railroads. The aqueduct crossing the Delaware River at Lackawaxen was converted into a highway toll bridge which is still in use today and is listed on the National Register of Historic Places.

Zane Grey, the well-known American author of western stories, began his writing career here. His home at Lackawaxen, now known as the Zane Grey Inn, has been converted into a museum containing his memorabilia.

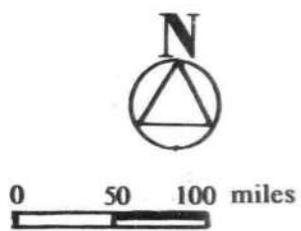
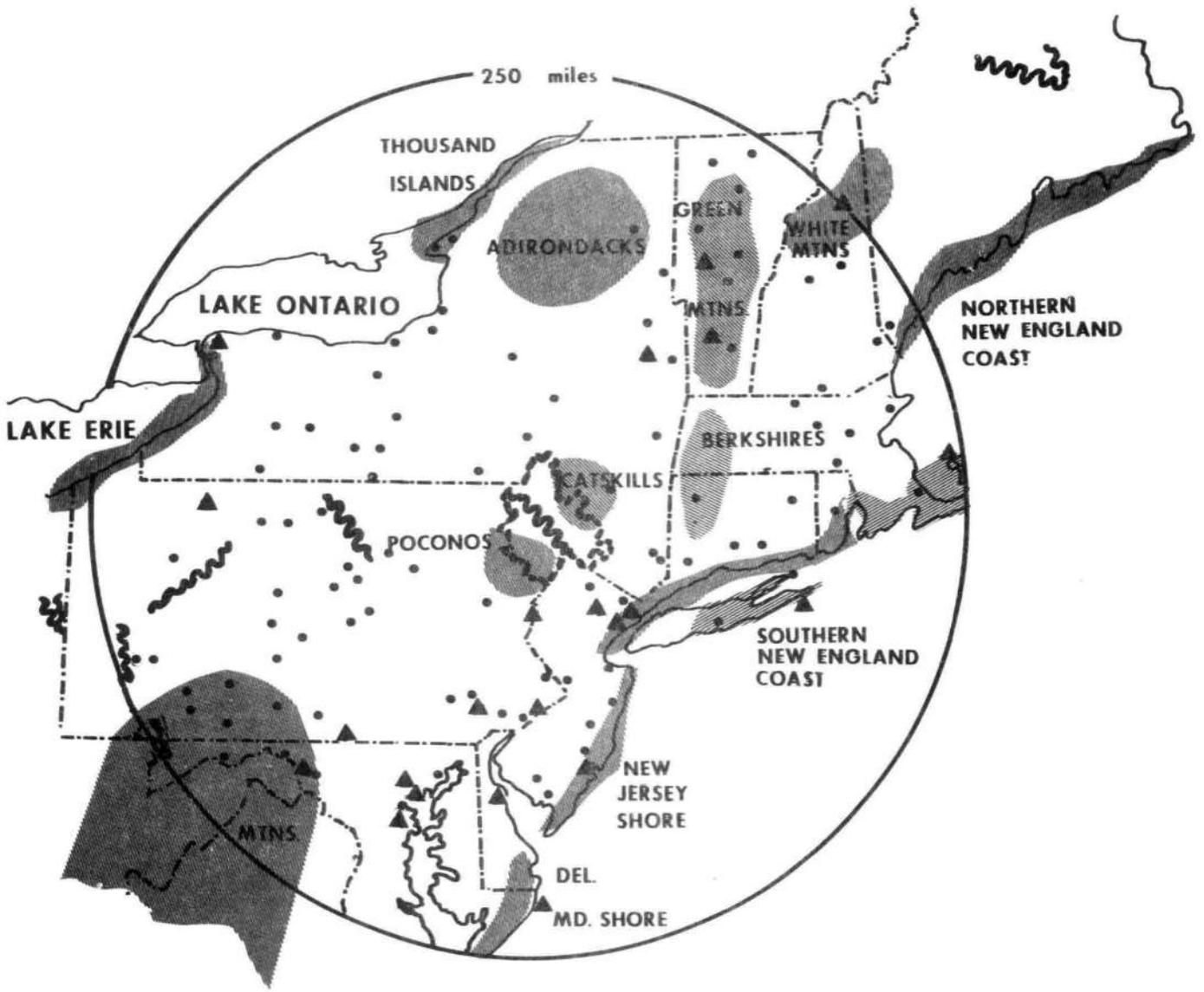
### Recreation Resources

Map 3 shows the traditional vacation destinations of the Northeast, as well as the major recreation resources. Major federally administered areas include the White Mountain, Green Mountain, and Allegheny National Forests; Cape Cod, Fire Island, the Assateague Island National Seashores; Bombay Hook, Brigantine, and Blackwater National Wildlife Refuges; Gettysburg, Antietam and Manassas National Battlefield Parks, Sites, or Military Parks; the Appalachian National Scenic Trail; the Chesapeake and Ohio Canal National Historical Park; and the Independence National Historical Park. The major areas managed by the State include the Adirondack and Catskill Forest Preserves and the Allegheny and Letchworth State Parks in New York, the Wharton Tract State Forest in the Pine Barrens of New Jersey, and numerous State Forests, Parks, and Game Lands.

The immediate Upper Delaware area possesses considerable private and public recreational resources. The private resort complexes in the Poconos and Catskills are well known to vacationers with youth camps, campgrounds, vacation homes, and private hunting and fishing preserves offering additional recreational opportunities. Public recreation lands include Pennsylvania State Parks, State Forests, and State Game Lands in the Poconos, while New York State ownership is more concentrated with the Catskill Forest Preserve. The Delaware Water Gap National Recreation Area is the major Federal development in the vicinity.

The 1972-73 Bureau of Outdoor Recreation nationwide inventory of public outdoor recreation areas identified more than 181 thousand acres in Federal, State, county, and local control in the five counties surrounding the Upper Delaware. This represents approximately three percent of the land in those counties. Of the total acres classified in this inventory, 65 percent is in the natural environment category which includes activities best carried out in harmony with nature (hiking, fishing, camping, picnicking, canoeing and sightseeing). Of the remaining classified areas, most were listed as general recreation areas, indicating more intensive development for a wider range of activities, usually dependent upon man-made facilities. Table 1 summarizes the public outdoor recreation acreage in the study area by quantity, county, and use.

**THE UPPER DELAWARE  
REGIONAL RECREATIONAL RESOURCES**



**LEGEND**

-  TRADITIONAL VACATION DESTINATIONS
-  FEDERAL PARKS & RECREATION AREAS
-  STATE PARKS & RECREATION AREAS
-  RIVERS AUTHORIZED FOR STUDY (PL 90-542)
-  STUDY AREA

TABLE 1

## CLASSIFIED PUBLIC OUTDOOR RECREATION ACREAGE IN FIVE-COUNTY STUDY AREA

State and County	High Density Recreation Areas	General Outdoor Recreation Areas	Natural Environment Areas	Unique Natural Areas	Historical and Cultural Sites	Total
<b>New York</b>						
Delaware	--	551	23,641	--	--	24,192
Sullivan	--	3,244	913	--	20	4,177
Orange	20	42,125	50	106	128	42,429
<b>Pennsylvania</b>						
Wayne	5	1,834	20,930	--	--	22,769
Pike	<u>5</u>	<u>5,288</u>	<u>72,288</u>	<u>10,068</u>	<u>--</u>	<u>87,649</u>
<b>Total</b>	<b>30</b>	<b>53,042</b>	<b>117,822</b>	<b>10,174</b>	<b>148</b>	<b>181,216</b>
<b>Pct. of Total</b>	<b>0.0</b>	<b>29.3</b>	<b>65.0</b>	<b>5.6</b>	<b>0.1</b>	<b>100</b>

Water related outdoor recreation opportunities are found at lakes and reservoirs. These resources permit sailing, power boating and water skiing, which complement rather than duplicate the recreational experiences available along a free-flowing river. Approximately 26 thousand acres of water area at 51 public and commercial owned sites are located in the five-county area.

While none of the rivers in the immediate area are Federally protected in their free-flowing state, four rivers in the greater region are being studied for possible designation under the National Wild and Scenic Rivers Act: the Youghiogheny in Pennsylvania and Maryland; Pine Creek in Pennsylvania; the Little Beaver in Pennsylvania and Ohio; and the Penobscot in Maine. Portions of two additional rivers in Pennsylvania, the Allegheny and Clarion, have been studied under the Act and found not to be eligible for inclusion in the National Wild and Scenic Rivers System. The Commonwealth of Pennsylvania, in its 1971 Statewide Comprehensive Outdoor Recreation Plan, recommends a number of rivers for further study to determine their suitability for inclusion in either the National Wild and Scenic Rivers System or in the Pennsylvania Scenic Rivers System. The State of New York, in its 1972 Statewide Comprehensive Outdoor Recreation Plan, expresses concern over the degradation of quality waterways, and legislative action has led to the State Wild, Scenic, and Recreational Rivers System designating 16 initial components within Adirondack State Park.

The river and the land surrounding it is being used for a variety of recreational activities. On the water itself, the novice canoeist as well as the veteran is attracted to the succession of interspersed pools, riffles, and rapids. The rocky river bottom, the occasional pools and the riffles, together with superior water quality, provide habitat for a number of game fish species, enhancing the sport fishing opportunities. Various modes of fishing are possible including float-fishing from flat-bottomed johnboats, rafts, canoes, or even from low-powered outboards, wading from shore, and bank-fishing. Publicly and privately owned canoe and fishing access areas exist on both banks. Several of these access sites have been developed in recent times by both New York and Pennsylvania. Hunters are attracted to the river and to adjacent land areas by white-tailed deer during the limited hunting season, and by geese and ducks following the river during the fall migration.

### Fish and Wildlife

The river provides an outstanding habitat throughout the study segment for smallmouth bass and walleye. The many riffles of the Upper Delaware make it especially valuable for the propagation of the anadromous American shad, which spawns not only in the main stem but also in the East and West Branches. Cold water releases from the Cannonsville and Pepacton reservoirs have led to the establishment of an excellent cold water fishery in the northernmost section of the Upper Delaware. Rainbow and brown trout propagate in abundance, and many trout fishermen have come to regard the river as one of the best sport fisheries in the Northeast.

The study reach supports a variety of native wildlife species which can be observed in their natural habitat and hunted in season. The habitat is favorable to the white-tailed deer. Small numbers of black bear remain in the area. There are moderate numbers of gray squirrel, red squirrel, snowshoe hare, cottontail rabbit, raccoon, opossum, porcupine, and similar small mammal species, and an abundance of fur-bearing mammals such as muskrat, mink, otter, and beaver. During the past fifteen years, wild turkey populations have increased considerably. Excellent populations of ruffed grouse are found along both sides of the river.

Woodcock are found in swamps and high water-table woodlands during their annual migrations. Large numbers of migrating ducks, geese, and other birds rest on the river, while mallard, black duck, wood duck, American merganser, and many passerine species nest in the neighborhood. On the migration path of raptors, the area provides habitat for a large variety of hawks and owls; the osprey, Southern Bald Eagle, goshawk, and peregrine falcon are among the rarities which may be sighted, as are the yellow-throated warbler and -- possibly -- the Eastern pine grosbeak. The usual complement of reptiles and amphibians

common to the Middle Atlantic States are also present, along with an occasional rare bog turtle. The northern copperhead and the timber rattlesnake are the only poisonous snakes in the area. The Southern Bald Eagle and the peregrine falcon are on the official list of world-wide threatened fauna and a mollusk, the crossed-teeth clam, is a candidate for inclusion on this list. There are no known endangered species of fish and wildlife contained on the official list of Endangered Native Wildlife.

#### Transportation and Access

Long distance roads provide good access to the Upper Delaware River region, including U.S. Routes 6, 106, 206, and 209, and New York Route 17 which is a major connector with the New York City and northern New Jersey metropolitan area. Local roads provide direct access to the river and access from major long distance routes, such as the Pennsylvania Turnpike and Interstate Highways 80, 81, and 84, is readily available, as noted by Map 4. Railroad service is provided from the northern New Jersey metropolitan area via the Erie-Lackawanna line which carries passengers from northern New Jersey northwest as far as Port Jervis, New York. Commercial airports serve Binghamton, New York and the Scranton and Wilkes Barre, Pennsylvania areas. Air service to Monticello, New York is available by way of New York City. Small non-commercial airports are found at several locations.

#### Population

The Upper Delaware River borders on the Atlantic Urban Corridor that extends from Boston to Washington, D.C. In 1970, roughly 52 million people or 25 percent of the national population, lived within a 250 mile radius of the river corridor. There are 48 Standard Metropolitan Statistical Areas (a town, city or county or a group of contiguous towns, cities or counties with a single unit containing over 50,000 inhabitants), within this complex, including New York and Philadelphia. The two largest metropolitan areas within a one hour drive are Scranton, Pennsylvania (234,107) and Binghamton, New York (268,328).

As of 1970, none of the five counties bordering the study segment had communities with a population exceeding 50,000. Table 2 provides data for this five-county area, illustrating trends over the past 20 years and projected changes through 1990. Pike and Wayne Counties in Pennsylvania remain sparsely settled. Pike County's small population has been slowly increasing for several decades and is expected to continue at a more moderate rate. Wayne County has experienced a long-term decline which has only recently been reversed and predictions are that the population will remain relatively stable. The riverfront townships in Wayne County have experienced a noticeable population influx, with a 1960-70 growth rate double that of the county as a whole.



TABLE 2

STUDY AREA POPULATION: CHANGES AND PROJECTIONS, 1950-1990

	<u>% Change</u> <u>1950-60</u>	<u>% Change</u> <u>1960-70</u>	<u>1970</u>	<u>% Change</u> <u>1970-80</u>	<u>% Change</u> <u>1980-90</u>
<u>Pike County, PA</u>	8.0	22.5	11,818	11.1	1.0
Riverfront townships			5,529		
Lackawaxen			1,363		
Shohola			574		
Westfall			1,348		
Matamoras			2,244		
<u>Wayne County, PA</u>	- 8.0	4.7	29,581	3.6	- 0.6
Riverfront townships			4,791		
Scott			604		
Buckingham			578		
Manchester			494		
Damascus			2,006		
Berlin			1,109		
<u>Delaware County, NY</u>	- 2.0	- 2.7	44,718	7.0	5.6
Riverfront townships			3,604		
Hancock			3,604		
<u>Sullivan County, NY</u>	11.1	16.1	52,580	16.6	17.2
Riverfront townships			7,946		
Fremont			1,047		
Delaware			2,260		
Cochecton			1,181		
Tusten			1,224		
Highland			1,377		
Lumberland			857		
<u>Orange County, NY</u>	20.7	20.6	221,657	26.7	31.9
Riverfront townships			4,370		
Deerpark			4,370		

SOURCES: U.S. Bureau of the Census  
 Projections supplied by New York Department of Commerce and  
 Pennsylvania Office of Planning and Development

The New York side of the Upper Delaware River historically has been the more densely settled. Delaware County's population has fluctuated within the 40,000 persons range for over 35 years. It is likely to rise slowly throughout the rest of the century. Sullivan and Orange Counties have shown steady population increases. Pressures on Orange County have been particularly intense with its population expected to nearly double before the year 2000. Sullivan County will probably be significantly affected by this same pattern.

### Economy

The five counties are essentially rural and with such a sparse population base, the local economy has persisted in its agricultural and tourist servicing orientation. In the agricultural field, emphasis is on dairy products in Wayne, Delaware and Orange Counties, while poultry and poultry products provide the bulk of farm income in Sullivan County.

The five-county area's many attractions include the Upper Delaware River, the Pocono and Catskill Mountains, and Lake Wallenpaupack, the largest water body entirely within Pennsylvania. These counties have traditionally provided recreation and resort facilities for people throughout the Northeast and depend heavily upon tourist revenues. Almost 43% of total earnings in Pike, for example, are attributable to service and wholesale and retail trade operations and Sullivan County's tourist receipts topped \$60 million in 1967.

Until recently, manufacturing has been of limited importance throughout the area. In towns where it has provided significant employment, there has been a reliance on production of apparel and related goods. Traditionally in Orange County, a large component of its manufacturing base has been in textiles and related product lines. In the last decade, this has been supplemented by an influx of technology-oriented industry. This expansion and diversification of Orange County's industrial base is expected to continue into the foreseeable future, and may eventually extend into the other New York counties bordering the Upper Delaware.

Incomes of residents in the Upper Delaware counties lag considerably behind statewide averages, although total personal income for the region exceeds \$1.26 billion annually. Median family income in Pike, Wayne, Delaware and Sullivan Counties is \$1,000 to \$2,000 less than their respective statewide median, according to the 1970 U.S. Census. More than 10% of the families in Wayne, Delaware, and Sullivan Counties have annual incomes below the federally-defined poverty level.

These counties historically have not had highly developed economies, however, there are now signs of increased economic activity. Several developments should have a significant impact on the economy of the five county area, including the increasing demand nationally for recreational opportunities resulting in a substantial growth in recreation related services and retail trade employment. In addition, the major economic influence on the region is associated with the expansion of urban development. Industry's search for new plant and office sites has already extended into Orange County, New York, and is expected to expand at varying degrees throughout the region.

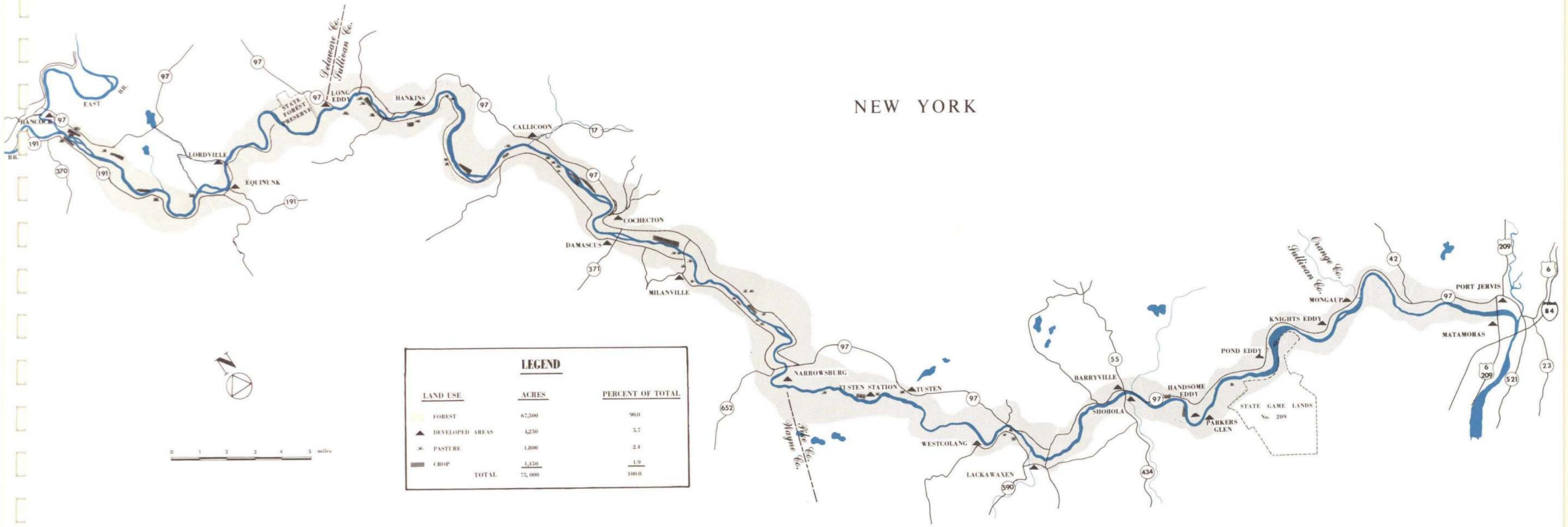
### Land Use

Map 5 illustrates land use within the study area. Approximately 90 percent of the land along the river is well-forested with second and third growth hardwoods, some conifers and shrubs. This forest cover provides watershed protection, wildlife habitat, and some timber. Commercial timber cutting has declined steadily in importance, with only 22.5 percent of the annual growth harvested. Increasingly, the forest is being utilized for recreation activities.

Four percent of the land is devoted to agriculture, with dairy farming, vegetable production, and poultry raising being the major activities. Over 65 percent of the agricultural activity along the river corridor occurs between the settlements of Hancock, New York and Milanville, Pennsylvania. Those river banks which adjoin croplands are stable and no major river bank erosion problem seems to exist. In the few places where livestock come to the river for water, and in the camping and picnic areas on the river-edge, a potential for river bank erosion exists. Careful land management can forestall such problems, however, and some of the communities along the river are initiating various types of land use regulations. In the past, the greatest damage to the river banks has been caused by floods, such as that which occurred on the tributaries during a flood in 1973.

The remaining six percent of the study area has experienced varying types of development including towns and small communities, resorts, organization complexes, group cabins, and farm buildings. Residential areas near towns, seasonal cabins, organization camps, campgrounds, boat and canoe rental areas, and picnic areas, are generally located on former agricultural land. There is little industrial development throughout the study area, except for Orange County; however, this type of activity has increased along the New York side of the river in recent years. A couple of inactive stone quarries and sand pits are located within the river corridor near Hankins, New York.

**THE UPPER DELAWARE**  
LAND USE WITHIN THE RIVER CORRIDOR



NEW YORK

PENNSYLVANIA

LEGEND		
LAND USE	ACRES	PERCENT OF TOTAL
FOREST	67,500	90.0
DEVELOPED AREAS	4,250	5.7
PASTURE	1,800	2.4
CROP	1,450	1.9
TOTAL	75,000	100.0



## Land Ownership

Most of the land along the river is privately held in individual parcels. There are three large private holdings: (1) the extensive acreage of Orange and Rockland Utilities Company in the Mongaup River Basin; (2) the linear route of the Erie-Lackawanna Railroad, which follows the river along the entire reach; and (3) the three separate tracts, belonging to the Upper Delaware Campgrounds, with property in New York below Callicoon, and further downstream in Pennsylvania. Map 6 illustrates general land ownership patterns.

The State of New York and the Commonwealth of Pennsylvania are the primary public owners. Pennsylvania's major holding is State Game Land #209 in Pike County, containing 4,391 acres, and five river access sites. The State of New York has 982 acres of State Forest Preserve land above Long Eddy and five river access sites.

Quasi-public ownership includes the 7,500-plus acres below Narrowsburg held by the Boy Scouts of America, and the 1,000-plus acre tract adjoining New York State Route 97 north of Knights Eddy held by the Girl Scouts of America, Morris Area Council.

## Water Rights and Use

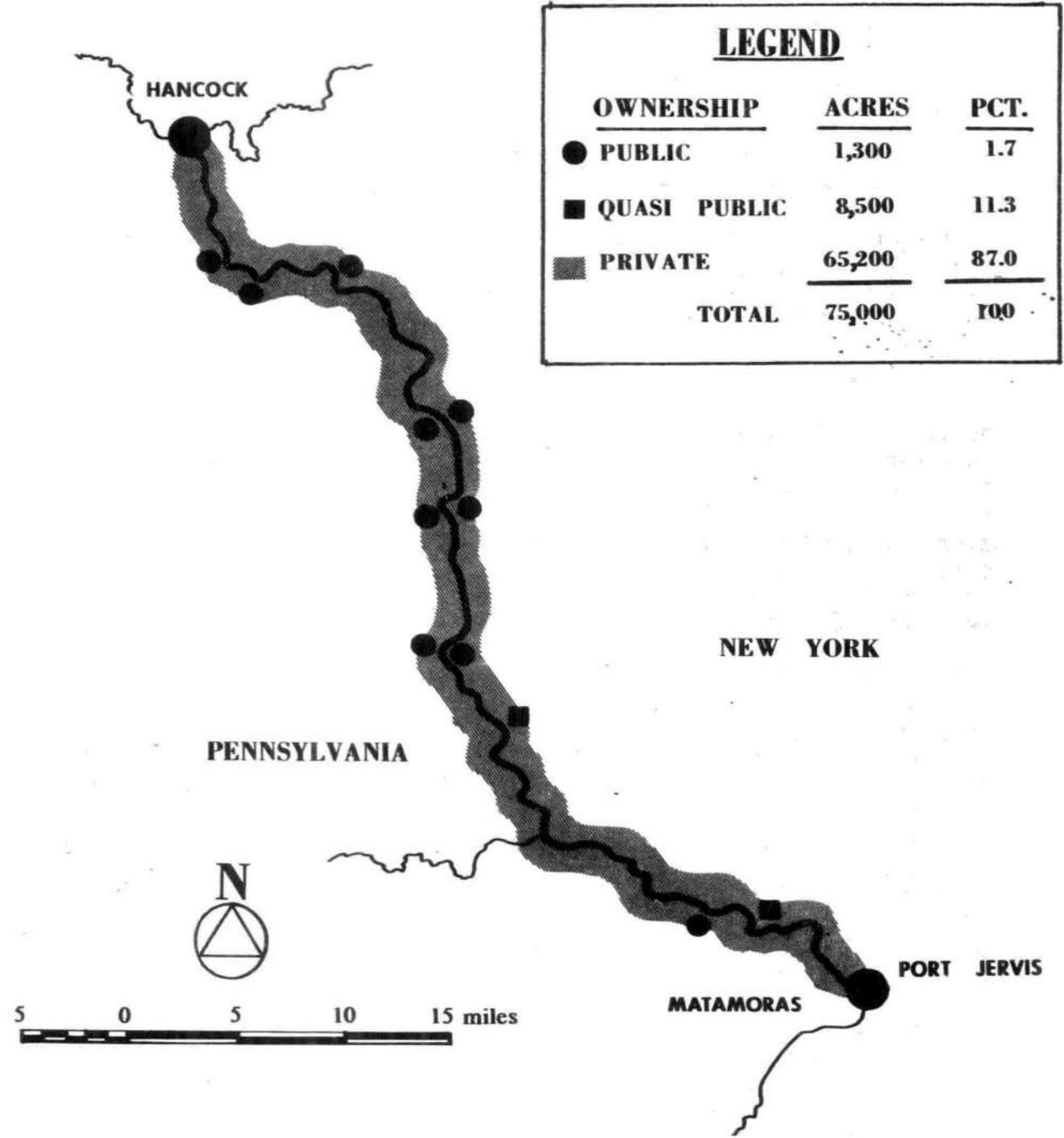
The subject of Delaware River water rights has been a source of controversy and dispute for many years, primarily between New York City needs for municipal water supply and downstream interests within the river basin. New York City was first granted the right to divert water from the Delaware River Basin in 1931. A ruling by the Supreme Court permitted the City to divert 440 million gallons per day (mgd), with the stipulation that the City release a limited quantity from their reservoirs to maintain minimum flows.

In 1954, the Supreme Court amended the 1931 decree, raising the amount of permitted diversion to 490 mgd. To compensate, New York City was required to release enough water from its reservoirs to guarantee a mean daily flow of not less than 1,525 cubic feet per second (cfs) at the Montague, New Jersey gauging station. The Court further decreed that this allocation be increased when the Cannonsville reservoir storage reached 50 billion gallons, about one-half capacity. In March 1967 this point was reached and the New York City diversion allowance was raised to 800 mgd and the minimum obligated downstream flow to 1,750 cfs. The 1954 amended decree also granted New Jersey the right to divert 100 mgd from the Delaware River Basin without making compensating releases.

The State of New York has taken steps to meet recent recommendations concerning adoption of a reservoir flow schedule by the State and New York City. Proposals for alternative releases were published in March 1974 in a report prepared by the Department of Environmental Conservation for the Upper Delaware River Regional Water Resources Planning Board. Discussions are being held between the State and the City.

MAP 6

**THE UPPER DELAWARE**  
**GENERALIZED LAND OWNERSHIP**



Determination of riparian rights and river bottom ownership on the Upper Delaware is a complex exercise. The State boundary between New York and Pennsylvania extends down the middle of the river. In New York State, property ownership includes the river bottom and extends to the State line, and any parcel or rights thereto may be subject to sale by the owner. Riparian rights generally rest with the owner of the adjacent land, but they can be, and in certain cases have been, purchased separately from the adjacent land, most notably in New York City's purchase of riparian rights in New York State downstream from its two water supply reservoirs on the East and West Branches. These particular riparian rights include neither the river bottom nor the subsurface mineral rights, which presumably remain with the original owner. Either the river bottom or the subsurface mineral rights may, it is believed, be sold, together or separately.

In Pennsylvania, the Commonwealth owns all river bottom lands from the low water mark, in accord with legislation dating to 1782. The subsurface mineral rights may, under certain circumstances, be leased out by the Commonwealth.

### Water Quality

The present water quality of the Upper Delaware is generally adequate for water contact activities. Dissolved oxygen levels are at or near saturation, ordinarily exceeding established stream criteria for hardness, color, and turbidity. Significant nutrient concentrations have been detected in the upper reaches of the West Branch, though these presently pose no threat of algae bloom to the river reach, despite its high saturation of dissolved oxygen. The Delaware River Basin Commission and both States require a minimum of at least secondary treatment and effective disinfection, as well as limitations for objectional elements or compounds in effluent materials.

Four small communities in New York (Hancock, Callicoon, Narrowsburg, and Barryville) are discharging sewage from individual septic tank systems into the Delaware River and its tributaries. These inadequately treated discharges have created local pollution problems. A comprehensive pollution abatement program of the New York State Department of Environmental Conservation anticipates correction of these conditions as Federal funds for pollution abatement become available. In other areas, sewage is presently disposed of adequately by subsurface means. Thus, water quality has remained high along most of the Upper Delaware.

The Delaware River Basin Commission temperature criteria permits a two degree rise above natural temperatures up to 68°F in trout-designated waters and five degree rise above natural temperatures up to 87°F in non-trout waters. Pennsylvania does not permit the addition of heat in trout waters when the temperatures exceeds 58°F. The difference in these criteria is especially relevant during a few weeks each spring and fall when the natural temperatures change rapidly.

The influence of Cannonsville and Pepacton Reservoir releases on downstream water temperatures is significant. From the Geological Survey's Quality of Surface Waters of the United States and Water Resources Data for New York, Part II, Water Quality Records, the following information has been selected to give an idea of temperature in the river, both before and after the creation of these reservoirs on the East and West Branches:

TABLE 3

RIVER TEMPERATURE RANGES (°F)

<u>Year</u>	<u>Location</u>	<u>June</u>		<u>July</u>		<u>August</u>	
		<u>Av.</u>	<u>Range</u>	<u>Av.</u>	<u>Range</u>	<u>Av.</u>	<u>Range</u>
1949	Narrowsburg (River Mile 289.9)	75	64-82	79	74-81	79	71-83
1968	Callicoon (River Mile 303.7)	64	48-79	72	63-84	63	54-74
1969	Callicoon (River Mile 303.7)	71	61-86	66	56-83	73	55-81

It can be seen that the 1968 and 1969 averages tend to be lower than those for 1949. This can be attributed to a release of cold bottom waters from the reservoirs in order to meet minimum flow requirements set by the Supreme Court. The record high of 86°F in June of 1969, for example, was followed by several days of steadily descending temperatures, likely as a result of releases from the reservoirs in order to maintain flow. The river tends to accelerate a warming trend when flow augmentation is withheld to increase reservoir holdings, and to cool once augmentation is made, since the augmentation comes from the cooler waters at the bottom of the reservoirs. The volumes of reservoir releases also have a great deal to do with the river water temperature at any given point in time. While the averages in 1968 and 1969 are lower than those of 1949, the maximum-minimum range is much greater, having been extended considerably beyond that apparent for 1949. This illustrates the "slug effect" of cold water releases.

Both water depth and water temperature are significantly affected by reservoir releases from the New York City water supply reservoirs on the East and West Branches, the hydroelectric reservoirs in the Mongaup drainage near the lower end of the reach, and Wallenpaupack Reservoir on the Lackawaxen River. On July 23, 1968, for example, the river level at Port Jervis, at the lower end of the reach, was observed to rise nearly a foot in two hours, followed by a descent time of about fifteen hours. Before operation of Cannonsville Reservoir began in 1967, releases from Pepacton Reservoir on the East Branch have caused a 20-degree temperature drop at Hancock, 28 miles downstream. Although cold water releases have produced an excellent cold water fishery in the uppermost stretch, these sudden temperature variances threaten the natural balance of the aquatic ecosystem throughout the study segment. Neither cold nor warm water fish populations can become stabilized if the temperature fluctuations are severe and frequent.

The application of pesticides within or affecting the river corridor, including applications on forest, pasture, and crop land adjacent to the corridor, should comply with the Federal Environmental Pesticide Control Act of 1972 (P.L. 92-516). Consideration should be given to banning, in the above-named areas, the use of all pesticides classified as "restricted" under the act. Aerial spraying of any pesticides should be minimized, restricted to allow adequate buffer zones, or prohibited.

#### River Flow Patterns

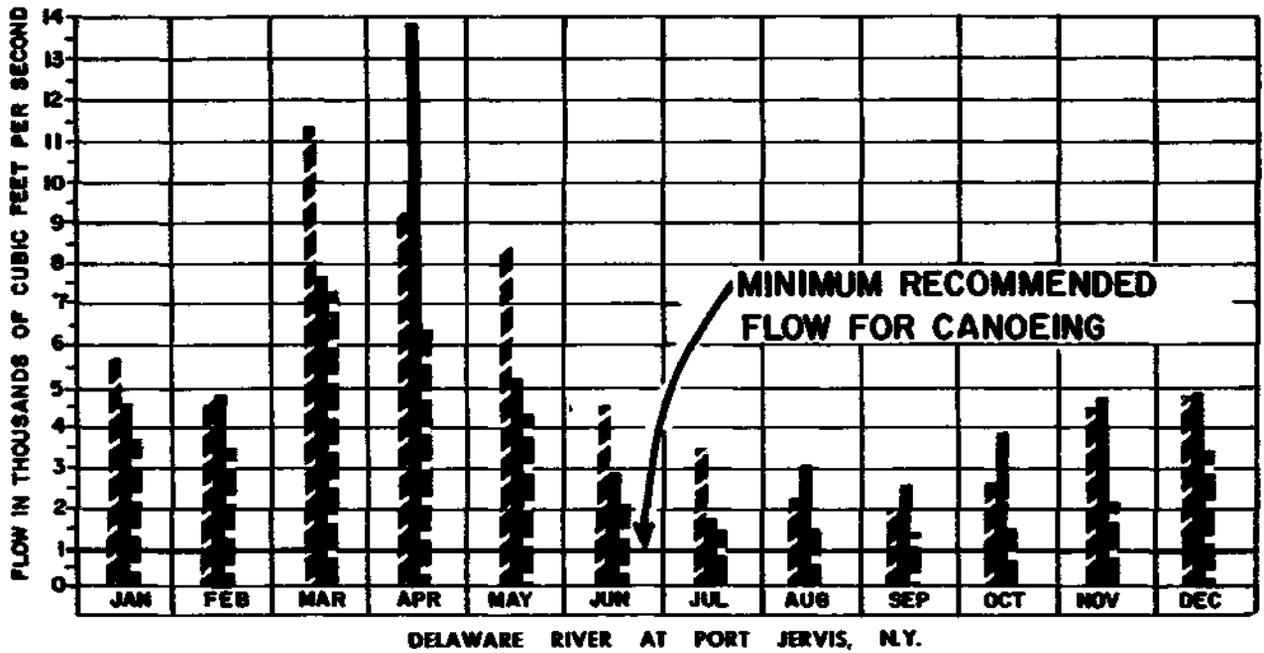
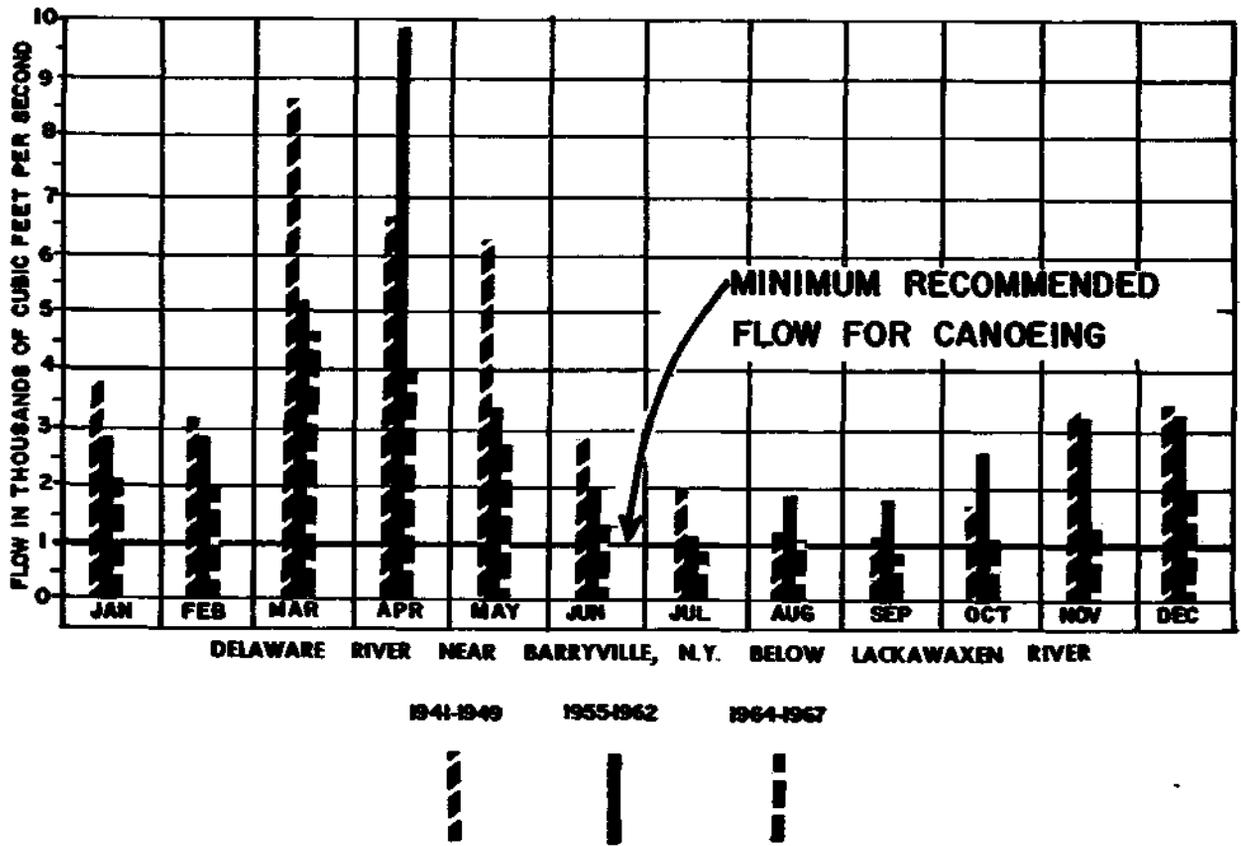
The Upper Delaware's seasonal flow pattern at Port Jervis, New York and near Barryville, New York, above the Lackawaxen River are shown in Chart 2. The period from 1941-49 is before either of the dams on the East and West Branches were constructed. By the 1955-62 period, the Pepacton Reservoir project on the East Branch had been completed, while the Cannonsville Reservoir on the West Branch was completed in the 1964-67 period. As can be seen in the two graphs, the seasonal flow pattern on a mean monthly basis has remained essentially the same since the 1940's. There has, however, been a reduction in the amount of flow, especially during the 1964-67 time period.

The pattern of reservoir releases can affect the quality of water-oriented outdoor recreation activities. For example, canoeing requires a minimum flow of approximately 1,000 cfs for a satisfactory float. When the regulated releases do not reach this level, the quality of the experience is diminished or even precluded. If a great volume of water is released in a short period of time, the safety of persons in the river can be impaired.

River flows, as they relate to recreational use, provide seasonal variations. During the late winter and spring, the high and medium high flows fill the river to its edges, greatly increase the velocity of the current, and create strong wave patterns. This is the season for adventuresome white water canoeing. Long pools are quickly

CHART 2

**THE UPPER DELAWARE**  
**MEAN MONTHLY FLOW**



traversed as the current sweeps the canoe downstream. By the end of May the river has warmed and calmed and is generally at the best level for canoeing. Throughout the summer, ledges, gravel bars and boulders break the water's surface. Care is necessary in maneuvering through these riffles. The late summer and autumnal rains again raise the river level and increase the velocity, providing a further season of canoeing before winter sets in. The river is generally too shallow for high powered motor boats, and there is thus little or no occasion for conflict between canoeists and speedboat enthusiasts.

Floods, which occur most often during late winter - early spring (melting snow run-off) and late summer (tropical storm season), cause relatively minor damage in the study reach since there is little industrial development and only limited urban development along the river banks. The greatest flood on record occurred in August 1955, when two hurricanes passed through the area in close succession. Along the Delaware River, over 85 percent of the flood damage occurred downstream of the study segment, between the Delaware Water Gap and Trenton. Within the study area, the single largest damage center was Port Jervis, which lies in the flood plain.

#### Water Resources Management and Development

There are no proposed water resource developments along the Upper Delaware, although six potential reservoir sites were identified by the Corps of Engineers between Hancock and Sparrow Bush, New York, and a seventh was investigated on the East Branch of the Delaware. The sites are discussed in the Comprehensive Survey of the Water Resources of the Delaware River Basin prepared by the U.S. Army Corps of Engineers in 1960. These potential sites were all subsequently deemed economically infeasible and were therefore dropped from consideration. Five of them were run-of-river developments for hydroelectric power; Hankins Site (river mile 313), Callicoon Site (river mile 303), Skinners Falls Site (river mile 295), Tusten Site (river mile 285), and Hawks Nest Site (river mile 259). The sixth location, Knights Eddy Site (river mile 263), was a multiple-purpose reservoir while a seventh site, Hawk Mountain Site, located 7 to 8 miles upstream from the study segment on the East Branch of the Delaware River, was a dual-purpose project. There is, however, a slight possibility that a channel widening of Mill Brook at Pond Eddy, New York may be initiated to alleviate flooding. This would cover about one mile of the stream starting a short distance from the main stem.

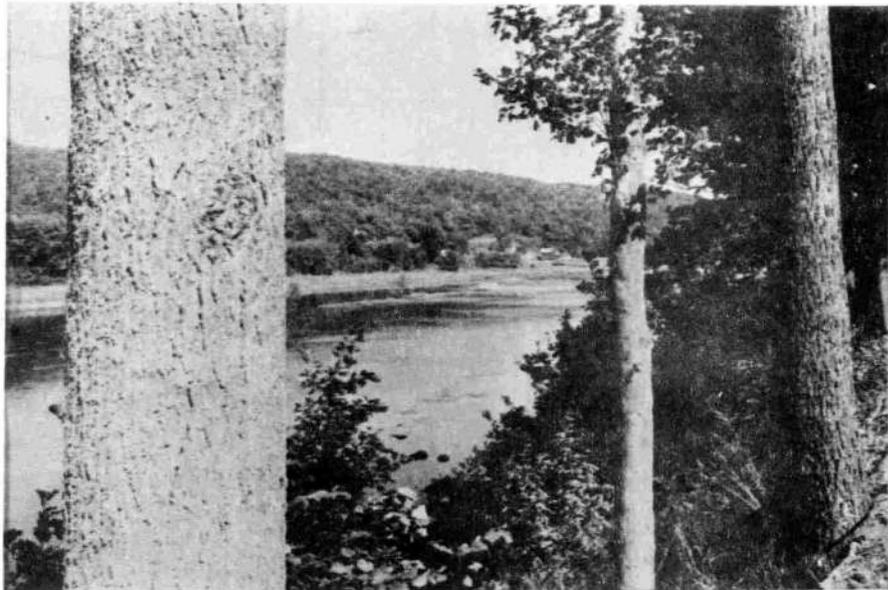
According to the Federal Power Commission, sites on the Delaware River near Barryville and Narrowsburg, New York, could be developed to provide 29,700 and 15,900 kilowatts respectively of conventional hydroelectric capacity. The potential Delaware project on the Mongaup River, with 10,000 kilowatts of conventional capacity would have its powerhouse located on a lower stretch of the Delaware. In addition, a two million kilowatt pumped storage project could be developed on the river at Long

Eddy, New York. A natural gas pipeline, owned by the Columbia Gas Transmission Corporation and operated under the jurisdiction of the Federal Power Commission, crosses the river in the lower reach. Also, a small nonjurisdictional natural gas pipeline owned by Pike County Power and Light Company crosses this segment of the Delaware.

### Summary

In summary, many present land uses along the river are not significantly different from that in the past -- agriculture, forestry, recreation, and minor industry. Use of the river segment itself is essentially for recreation and allied purposes, with minor use for agricultural needs (some localized irrigation), and no significant withdrawals for public or municipal water supply or industry. Chief among recreation-allied purposes are maintenance and propagation of resident sport fish and other aquatic life, spawning, nursery habitat, passage of anadromous fish, and maintenance and propagation of trout.

# EVALUATION



FORESTED BANKS OF THE UPPER DELAWARE



SKINNERS FALLS

### III. EVALUATION

The segment of the Upper Delaware River between Hancock, New York and Matamoras, Pennsylvania has been evaluated to determine its qualification and classification in accordance with the requirements of the Wild and Scenic Rivers Act, Public Law 90-542, and the general criteria contained in the "Guidelines for Evaluating Wild, Scenic, and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System...", published jointly by the Department of the Interior and the Department of Agriculture in February 1970.

#### Qualification

It has been determined that the 75.4-mile segment of the Upper Delaware River extending from the confluence of the East and West Branches at river mile 330.7 to Matamoras at river mile 255.3 qualifies for inclusion in the National Wild and Scenic Rivers System. This conclusion is based on the following:

1. The study segment and its immediate environment possesses outstandingly remarkable scenic, recreational and cultural values, as required by Sections 1(b) and 2(b) of the Act. Its archeologic-historic and fish and wildlife values are also of significant interest.

The narrow river valley possesses a rich variety of vegetative types that effectively screen many of the scattered communities and related light development. Occasional fields and pastures add variety to an already interesting landscape. The overall impression of the river corridor is of tranquil scenic beauty.

The area possesses developed recreation resources, both private with youth camps, campgrounds, vacation homes, and hunting and fishing preserves, and public with state parks, forests, and game lands. The river is an important part of this region's recreation resource, offering the recreationists an opportunity to canoe, fish, swim, sightsee, and participate in related activities on a notable river.

The region is rich with happenings of the past -- the Lenape Indians who preceded the migration of Europeans, friction between Indians and the frontiers people, the beginning of the area's timber industry with rafting of logs in 1764, farming of cleared land, and development of the Hudson and Delaware Canal -- imparting high cultural and historical significance to the area.

The river provides an outstanding habitat for both a cold and warm water fishery. Anadromous species such as shad and the American eel use the river. The river corridor supports a good variety of large and small wildlife species. Both waterfowl and upland game populations abound, as do reptiles and amphibians common to the area.

2. The study segment is in a free-flowing condition.

Although several impoundments are located upstream from the main stem, there is no slack water within the study segment. The river possesses a variety of flow conditions from fast water to deep calm pools.

3. Although flow rate and water level vary occasionally due to upstream reservoir releases, the stream normally has a water flow and level sufficient to permit full enjoyment of water-related outdoor recreation activities, generally associated with comparable rivers.

River flows have seasonal variations, with high and medium high flows during late winter and spring, increasing velocity and wave patterns. Mid-summer flows allow more exposure of the river bottom and warmer waters for swimming. Late summer and fall rains again raise the river for a further season of canoeing before winter sets in.

4. The overall condition is acceptable, even though water quality in localized segments of the river is marginal and in some cases does not meet the criteria recommended by the National Technical Advisory Committee on Water Quality.

Water quality generally permits water contact activities such as swimming. However, a few communities are currently discharging inadequately treated sewage and septic tank overflows into the river and its tributaries. Such discharges create localized high concentrations of coliform bacteria. Reservoir releases frequently cause rapid fluctuations in temperature, adversely affecting the river's desirability for swimming. Extreme temperature variations can result in an unstable fish population -- neither warm nor cold water species prospering. The water quality standards adopted by the States will clearly help to insure the procurement or maintenance of high quality water resources on a continuing basis.

5. The study segment is long enough to provide a meaningful recreation experience.

In summary, the overall impression of the river and its immediate environment leads to the conclusion that it is a resource worthy of preservation. When viewed collectively, the river's overall qualities more than compensate for the few unfavorable conditions which are generally rectifiable or are now being improved.

## Classification

Following a determination that the river qualifies for inclusion in the National Wild and Scenic Rivers System, the following classifications presented in Section 2(b) of the Act were taken into consideration:

Every wild, scenic, or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the National Wild and Scenic Rivers System and, if included, shall be classified, designated, and administered as one of the following:

**Wild river areas --** Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

**Scenic river areas --** Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

**Recreational river areas --** Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

It was concluded that the river should be classified as part scenic and part recreational. There are three proposed recreational sections, totaling 50.3 miles. They include the river towns and hamlets having concentrated development visible from the river. These segments are separated by two scenic reaches, totaling 25.1 miles, having little development. None of the river was considered qualified for wild designation because of closely paralleling roads and railroad rights-of-way. The classifications are primarily based on the following factors:

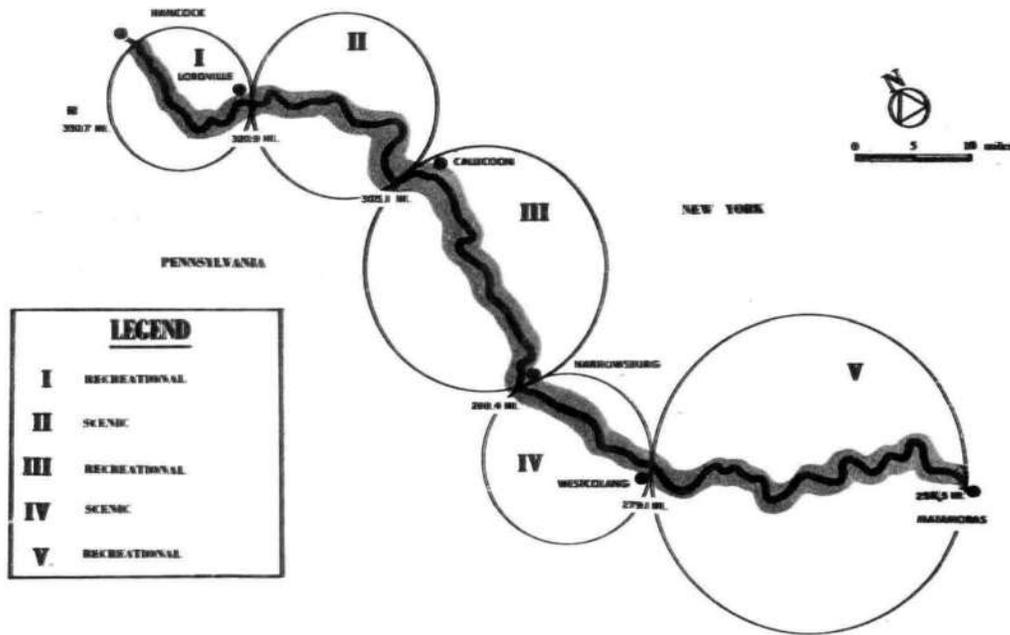
The study reaches are free of impoundments.

The water quality generally meets the minimum criteria for desired types of recreation and is capable of supporting the propagation of aquatic life normally adapted to the habitat of the stream.

The shoreline generally possesses some degree of development along nearly the entire length of the river.

The entire river is generally accessible by road or railroad. The railroad tracks which parallel the entire study segment are usually well screened by vegetation.

MAP 7  
**THE UPPER DELAWARE**  
 RECREATIONAL & SCENIC SECTIONS



LEGEND	
I	RECREATIONAL
II	SCENIC
III	RECREATIONAL
IV	SCENIC
V	RECREATIONAL

The classified areas are described as follows:

- I RECREATIONAL - From the confluence of the East and West Branches to 1/2 mile downstream from Lordville, N.Y. (river mile 330.7 to river mile 320.9).

The river within this reach is paralleled by Pennsylvania Route 191 and, on the New York shore, by the Erie-Lackawanna Railroad for the entire 9.8 miles. The southern limits of the village of Hancock and the village of Lordville, New York, plus the villages of Stockport, Dillintown and Equinunk, Pennsylvania, are located along this stretch of the river. There is one bridge crossing and it is at Lordville. The shoreline is mostly forested with a few areas of cropland and pasture.

- II SCENIC - From 1/2 mile downstream from Lordville to 1-1/4 miles upstream from Callicoon, N.Y. (river mile 320.9 to river mile 305.1).

Within this 15.8 mile reach there are no paralleling roads on the Pennsylvania side of the river. In New York, Route 97 follows the river for about three miles. Although the Erie-Lackawanna Railroad follows the New York shore, it is generally well screened from the river. The villages of Long Eddy and Hankins, New York, one road crossing at Kellams Bridge, a few areas where the railroad is visible, and two access sites are the only evidence of man in this reach. There are croplands on the Pennsylvania shore but they are screened from the river. The New York State Forest Preserve at Jensen Hill lies adjacent to this reach.

- III RECREATIONAL - From 1-1/4 miles upstream from Callicoon to the lower limits of Narrowsburg, N.Y. (river mile 305.1 to river mile 288.4).

There are four bridge crossings in this 16.7 mile reach, which is paralleled by the Erie-Lackawanna Railroad and Route 97 in New York, and by county roads on the Pennsylvania side. Much cropland is found along this segment of the river, as are the villages of Callicoon, Cochecton, Skinners Falls, and Narrowsburg, New York and Damascus and Milanville, Pennsylvania.

- IV SCENIC - From the lower limits of Narrowsburg to 1 mile downstream from Westcolang, Pa. (river mile 288.4 to river mile 279.1).

Although the Erie-Lackawanna Railroad bridges the river, there are no paralleling roads along this 9.3 mile reach, with the exception of a county road between the villages of Westcolang and Masthope, Pennsylvania. The shoreline is generally forested with steep slopes. There is little evidence of man's intrusion.

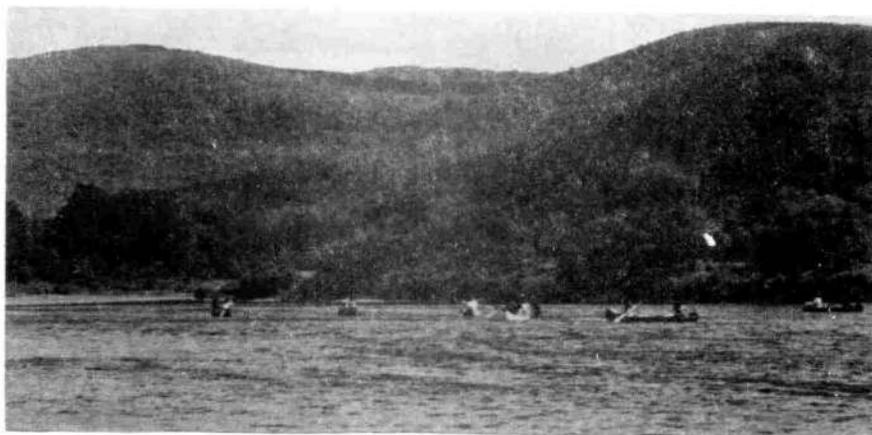
- V RECREATIONAL - From 1 mile downstream from Westcolang to Matamoras, Pa. (river mile 279.1 to river mile 255.3).

This 23.8 mile long reach is paralleled by the Erie-Lackawanna Railroad and New York Route 97 for the entire distance. Route 97 is visible from the river for a considerable distance. There are three road bridges and one railroad bridge in this segment, plus the villages of Minisink Ford, Barryville, Handsome Eddy, Pond Eddy, Knights Eddy, Mongaup and Sparrow Bush, New York, and Lackawaxen, Shohola, Parkers Glen, Pond Eddy, and Rosas in Pennsylvania.

# THE PROPOSED ACTION AND ALTERNATIVES



**WHITE WATER CANOEING**



**GROUP CANOEING ON THE MORE PLACID WATERS**



**SWIMMING AND FISHING**

## THE PROPOSED ACTION

The spatial and management alternatives presented in this report have been extensively reviewed and commented upon by government officials, conservation organizations, and private individuals. Their suggestions have been evaluated and where appropriate, incorporated into the recommendations. Rather than selecting any one spatial and management alternative in its entirety, the proposal set forth in this section combines and refines features of several of the options originally presented.

### Purpose

Objectives under which the Upper Delaware River would be managed as a National Scenic and Recreational River are:

1. To preserve the river and its immediate environment in its existing natural setting.
2. To preserve the free-flowing condition of the waters.
3. To prevent degradation of the water quality.
4. To provide high quality recreational opportunities associated with a free-flowing river for present and future generations.
5. To provide recreational use of fish and wildlife resources within the framework of appropriate Federal and State laws.
6. To provide for a level of recreation use that minimizes deterioration of land and water resources.
7. To assure preservation of archeological, historic, and cultural values.

### Overview

**Boundaries** - Lateral boundaries of the 75-mile segment would extend from ridgeline to ridgeline, encompassing approximately 75,000 acres within the protection boundary.

**Protection** - The Governors of New York and Pennsylvania, jointly or through the Delaware River Basin Commission, and with the cooperation of local governments will take the lead in developing and implementing necessary land use control measures.

**Management** - The National Park Service would have primary responsibility for recreation management of the designated segment of the river. The Governors of the States, DRBC, and local governments would cooperate in the implementation and management of the land use control measures. An Upper Delaware Citizens Advisory Council would be established to encourage maximum public involvement in management of the river corridor.

Acquisition and Development - The National Park Service would acquire 20 existing recreation sites and land for two information centers at the termini, totalling 450 acres by full title purchase and donation. The National Park Service would be authorized to acquire up to an additional 1,000 acres with approval of the Advisory Council as future needs and conditions warrant.

Cost Estimates - Acquisition of existing recreation sites and land for two information centers approximate \$1,000,000. Acquisition of up to an additional 1,000 acres is estimated at \$2,000,000. Development costs are estimated at \$1,600,000 while costs for operation and maintenance of the facilities for a 5-year period are approximately \$700,000. Development of land use control measures is estimated at \$500,000.

Designation - Inclusion of the river segment in the National System will be effective upon determination by the Secretary of the Interior that adequate land use protection measures have been implemented. Overall, implementation of this proposal would provide more environmental benefits that it would restrict or curtail.

TABLE 4

SUMMARY: FACTORS OF THE PROPOSED ACTION

Objective	To provide a wide protection zone with little disruption to the area at a low implementation cost
Corridor Protection	Ridgeline to ridgeline
Land Acquisition (acres)	
*Full Title	450
Land Use Controls	74,550
Total Protection Zone	<u>75,000</u>
River Segment Length (miles)	75.4
Facility Sites (number)	20 plus 2 information centers
Five-year Cost Estimates ('75 \$)	
*Land Acquisition	\$1,000,000
Development of Facilities	\$1,600,000
Operation and Maintenance	\$ 700,000
**Development of Land Use Control Measures	\$ 500,000
	Total \$3,800,000
Management	National Park Service
Recreation	Governors of Pa. and N.Y.,
Land Use Control Measures	Delaware River Basin Commission,
	and local governments
Advisory	Upper Delaware Citizens Advisory Council

\* The National Park Service is authorized to acquire up to 1,000 additional acres at an estimated cost of \$2 million, which must be approved by the Upper Delaware Citizens Advisory Council.

\*\* Estimate based on information from Delaware River Basin Commission for two-year period.

## Details of the Proposal

Protection and Management - Boundaries of the river protection zone would extend from ridge to ridge, including all of the river corridor within line-of-sight from the river (see Map 2). All of the main stem islands would be included in the boundary, but lands extending along tributary streams would not be included except where located within the protection boundary. An estimated 75,000 acres would be included within the protection boundary. Inclusion in the National System depends upon the Secretary of the Interior's determination that adequate land use control measures have been undertaken within the river corridor. Protection of the river environment would primarily be the responsibility of the State of New York, the Commonwealth of Pennsylvania, local governments, and the Delaware River Basin Commission. The Department of the Interior, through the National Park Service, would assume recreation management responsibilities. The proposal envisions a phased land management process consisting of: 1) a DRBC temporary moratorium on development permits, 2) adoption of local zoning, 3) development and implementation of land use control measures, and 4) nodal management by the National Park Service.

The Delaware River Basin Commission should not issue any permits which could lead to further development within the protection boundary until an adequate land use control measures are established. These temporary moratoriums would be lifted within each political jurisdiction having the power to zone whenever the governmental unit instituted effective land use controls sufficient to protect the river environment. The Delaware River Basin Commission is currently cooperating with the New York Department of Conservation in helping to develop a comprehensive water-based outdoor recreation plan for the Upper Delaware Basin. The Commission is assisting the Federal Power Commission in their review of the total water resources of the Upper Delaware basin. The Commission constantly reviews and approves plans for sewage treatment facilities and water withdrawals.

At the local level, the land use management process would begin with the enactment and enforcement of strong zoning ordinances by local governments. The States would encourage and technically assist the counties and other local governments in this endeavor. Many of the local units of government along the study segment are currently in the process of instituting subdivision regulations.

The Governors of New York and Pennsylvania, jointly or through the Delaware River Basin Commission, and with the cooperation of the local governments will take the lead in developing and implementing necessary land use control measures to provide an acceptable level of protection. Such a system would provide a framework within which land use patterns can be evaluated and land use decision-making optimized.

This system will help assure that land use practices within the protection boundary do not conflict with scenic and recreational river designation. All land use management techniques, (such as building codes, flood plain and other zoning, utilizes rights-of-way, water and sewer line permits, plant and dwelling sitings, signs, refuse and sanitary landfills, mining, farming, lumbering, etc.) would be integrated so that development and growth patterns can be effectively and efficiently channeled in a manner which conforms with sound land use principles. It may be desirable for local governments to extend land use control measures beyond the river corridor to prevent deteriorating of land and lowering of water quality due to undesirable development.

The Delaware River Basin Commission should fully exercise the powers it has with respect to flood plain zoning, control over water flow, water rights, water and sewer lines, plant siting, and related matters. The Commission may also acquire easements where land use control measures have not been implemented or deemed inadequate. The Flood Disaster Protection Act of 1973, Public Law 93-234, can assist in the flood plain zoning effort. It mandates that any insurable facility developed or acquired with Federal financial assistance and located in a flood hazard area in a community eligible for national flood plain insurance must have flood insurance.

Upon finding that adequate land use control measures have been achieved the Secretary of the Interior will direct the National Park Service to assume its recreation management role. The concept of nodal management, with a limited number of small recreation sites, would be adopted for purposes of serving recreation interest on the river. The Department of the Interior, through the National Park Service, would be responsible for acquiring nodal recreation sites, policing of river-oriented recreational uses, development and administration of comprehensive recreation management policies and procedures, and participation in programs which assure the integrity of the visual corridor. The National Park Service in cooperation with local units of governments would develop measures for solid waste management. Full title in a limited acreage of lands would be acquired by the Federal government for access and recreational sites. The National Park Service will prepare a master plan outlining the acquisition, development, and management plan for the recreation sites. The master plan will also determine the optimum "carrying capacity" of the river and its environment.

An Upper Delaware Citizens Advisory Council would be established to encourage maximum public involvement in the land use and recreational management processes and to cooperate in the development of the land use control measures. Its primary purpose should be to advise the Secretary of the Interior and the Governors of New York and Pennsylvania on matters affecting the river environment. The Council's membership should consist of: one representative from Delaware County and one

from Orange County; two representatives each from Sullivan, Wayne and Pike Counties (all County representatives should be residents of riverfront townships); and two members appointed by the Secretary of the Interior to represent river recreation use groups at large.

Acquisition and Development - Under the nodal management concept, the initial effort of the National Park Service would be to acquire 20 existing river recreational sites including facilities and land for two information centers to be located at the termini either by full title acquisition or through donations. Acquisition would involve approximately 450 acres costing an estimated \$1 million which would include any severance and relocation costs. The existing recreation facilities would be upgraded to utilize them efficiently at a cost of approximately \$1,600,000. It may also be necessary to acquire additional land at these sites for optimum use.

Extreme care would be taken in the location of facilities, with primary emphasis upon retention of the existing environmental setting at the site being altered. Separate environmental assessments would precede any such construction activity.

Commercial recreation developments included in the 20 designated sites which do not conflict with river management objectives would probably be purchased and leased back for continued private operation, subject to appropriate regulations to assure environmental protection. The National Park Service should determine which sites may be eliminated if necessary after acquisition. Some minimal provisions for sanitary facilities should be available every ten miles along the river. If possible, these should be located in areas designated as recreational. The property of the Boy Scouts of America would not be acquired as long as it would remain in their ownership and its use continues to be compatible with the management of the study segment. The existing sites affected are as follows:

TABLE 5

## EXISTING RIVER RECREATION SITES -- UPPER DELAWARE RIVER

<u>Map #</u>	<u>River Mile</u>	<u>Size in Acres</u>	<u>Owners</u>	<u>Facilities</u>	<u>Existing Capacity (persons)</u>
1	325.0	27	PA	L,P	650
2	322.8	2	PA	L	
3	321.2	10	Private	L,P,T	
4	315.4	8	Private	L	
5	310.9	19	Private	L	
6	303.6	1	NY	L	
7	303.6	60	Private	L,P,T,S,R	1200
8	303.3	1	PA	L	
9	302.5	120	Private	L,P,T	600
10	298.7	1	NY	L	
11	298.2	1	PA	L	
12	296.3	55	Private	L,P,T	1000
13	295.2	2	NY	L,P	50
14	290.5	30	Private	L,R	600
15	290.4	2	Private	L,R	
16	290.1	2	NY	L,C	50
17	289.7	1	PA	L	
18	277.5	4	Private	L,T	100
19	275.6	27	Private	L,T	550
20	273.5	2	Private	L	

L - Launch  
 P - Picnic  
 C - Canoe Camp  
 T - Tent/Trailer Camp  
 S - Swimming  
 R - Boat/Canoe Rental  
 PA - Pennsylvania  
 NY - New York

The National Park Service would be authorized to acquire up to 1,000 additional acres in full title at an estimated \$2 million, as future needs and conditions warrant. This could include future acquisition of parcels having unique scenic or historical/archeological significance. The cost for the operation and maintenance of the proposed sites is estimated at \$700,000 during the first five-year period.

The intent of the proposed recommendation is to protect the river corridor by land use control measures with a minimal amount of acquisition by the Federal Government. In limited cases where land use regulations are not being adequately enforced or have become inoperative, the National Park Service would be authorized to acquire easements, either by negotiation or eminent domain, within the protection zone.

Environmental Quality - The Delaware River Basin Commission, with the assistance of the States, the U.S. Environmental Protection Agency, and other concerned agencies, should encourage state and local agencies, to accelerate their water pollution abatement efforts in order to further improve the water quality of the Upper Delaware.

The State of New York and New York City should adopt and enforce a flow schedule from the Neversink, Pepacton, and Cannonsville Reservoirs at a level which maintains water quality, retains the existing cold water fishery, and retains flow conditions adequate for boating along the Upper Delaware River.

### Economic Effects

Implementation of the recommended proposal would not result in major economic changes within the five counties bordering the Upper Delaware River. Presently, recreation-oriented businesses, catering to the demand of tourists, vacationers, and sportsmen, predominate in many of the small settlements. It is expected that the proposal would be an impetus to continued growth in the recreation and retail trade sectors.

In order to protect the environmental quality of the river corridor, the proposal recommends strong land and water protection measures. While the recommendations do not affect the operation of existing commercial and industrial enterprises, they would prohibit new development which is incompatible with the purposes of the National Wild and Scenic Rivers Act. Thus, the proposal would not affect current economic standards within the river corridor, although it could limit commercial and industrial growth there. Since high-quality development would be permitted within existing communities, and since the amount of buildable land (i.e., land not excessively sloped and outside the flood plain) within the protection boundary is not large, the proposal's impact on jobs and incomes should be minor.

A small boost to the local economy is expected from the infusion of capital to upgrade, operate, and maintain the river recreation sites and construction of two information centers at the termini. Most of these funds would come from Federal sources and would not be available to the region if the proposal is not implemented.

Certain types of emergency services would continue to be provided by the counties and municipalities. These include hospital services and fire protection. Insofar as the proposal generates greater recreation use along the river, the incidence of personal accidents and fires is expected to increase. The monitoring and policing of river-oriented recreation uses by the recreation management agency should offer some preventive assistance; however, much of the expense of providing emergency services is likely to be borne by local governments and institutions.

Designation of the Upper Delaware as a component of the National System should not have a significant impact on the property tax structure of river municipalities. The primary cost to the counties involved is a loss of an estimated \$66,000 in property tax revenues. Presently, no program exists to provide payments in lieu of taxes by the Federal Government to defray this loss. However, peripheral development just beyond the designated area may follow as it has in other places, offsetting the tax loss due to withdrawal by an increase in tax revenue from new development. Only about 400 acres of the initial full title purchase will result in ownership transfers from private individuals to the public ownership. These purchases will be scattered along the river corridor so that no single municipality will find its tax base eroded. Moreover, some of the private lands transferred to public ownership would continue to have privately-run recreation services operating on them. These businesses could be obligated to contribute payments in lieu of taxes for the municipal benefits they receive.

The property tax impact of the authorization for future full title purchases should similarly be insignificant. Possible additional acreage involved (1,000 acres) is small, especially in relationship to the total land area of the protection boundary. Future purchases would be scattered, so that no single municipality would be affected significantly. Moreover, local control over the location of those purchases is provided, since any such purchases would require the approval of the Upper Delaware Citizens Advisory Council.

One potential major impact on the property tax structure does exist. If the proposal is implemented and, at a future date, the Secretary of the Interior finds that local land protection measures have become inadequate, the National Park Service may be directed to acquire development rights within the unprotected area. Depending upon the seriousness of the problem and the land area involved, this could result in removing acreage within a single municipality from all but the minimal assessment category. This impact can be simply avoided, however, by the municipality enacting and vigilantly enforcing adequate land protection ordinances.

Property in the riverfront townships may appreciate, although any such gains are likely to be partially offset by tax reassessments. In rare instances, the increased tax burden may force the discontinuance of marginal economic enterprises (i.e., businesses which are just barely profitable under existing conditions). This should not, however, be a general consequence. Persistent population and economic pressures from Megalopolis are likely to have a far more significant impact on local land use patterns and regional economic trends than the proposed protection measures in the Upper Delaware River corridor.

Most of the communities along the river have not instituted flood plain zoning or other significant measures which would assure that new construction activity would not occur on lands susceptible to flooding. By protecting the flood plain from urban encroachment, the proposal would eliminate the potential for economic disaster resulting from extensive development on the flood plain. Riverfront townships would not have to be as concerned about serious flooding incidents, since maintaining the flood plain in open space is the best method for insuring against the need for flood disaster relief.

Other economic impacts depend upon the river management strategy ultimately pursued and the ability of local governmental units to integrate and channel private land use decisions in a way that assures optimum results. Long term economic benefits may be realized from insistence upon quality development. Were the Upper Delaware to eventually be strongly influenced by Megalopolitan pressures, marginal enterprises could crowd the river bank and industrial waste discharges badly foul the water. Riverfront communities could suffer the problems of blight, impaired health, and reduced safety, that have been the experience of counties and other towns along the Nation's waterways.

The overall goal is to provide for the continuation of traditional land use patterns in a river area whose shoreline and watershed are largely forested and undeveloped. Basic to these recommendations is the realization that the existing recreation use, vacation home and residential development, and commercial and industrial development, while still at a volume that does not immediately endanger the resource, is nearing a point where significant deterioration will occur unless adequate safeguards are provided.

Whether or not the Upper Delaware receives national designation, development and utilization of the Upper Delaware area is expected to increase, as is the use of the river itself. Without implementation of a comprehensive management program, those properties most desirable for aesthetic, recreational and other reasons will be quickly subdivided and lost. Such activity will eventually result in extensive linear shoreline development, further limiting the general public's opportunities for use and enjoyment of the area. Uncontrolled development can slowly erode the significant intrinsic values of this area for both the landowner and the occasional visitor.

#### Environmental Impact

Inclusion of the Upper Delaware in the National System will have an overall effect of preserving existing scenic, recreational, historic, fish and wildlife, and water quality values of the river. No significant adverse effects are anticipated on ecological systems. The present land use pattern would be stabilized. Some environmental damage to the terrain and vegetation may be expected as a result of visitor use. An environmental impact statement has been prepared concerning the proposed action.

## ALTERNATIVES CONSIDERED

### Spatial Alternatives

Alternatives considered for the proposed Upper Delaware Scenic and Recreational River are listed below. A comparison summary of the various alternatives is presented in Table 6.

1. No Action
2. Information Management
3. Strip Management
4. Control Management
5. Different Segments

Alternative I - No Action - Under this alternative, the Upper Delaware River would not be included in the National Wild and Scenic Rivers System. The land within the protection boundary would remain essentially in private ownership with few land use controls in operation.

There are numerous examples along the eastern seaboard of the consequences of failing to adequately protect a major recreational resource. Although strong local leadership may be temporarily effective in protecting a particular location, adverse uses gradually encroach and intrude, ultimately causing deterioration of the resource as competition intrude, ultimately causing deterioration of the resource as competition for land grows more intense. Continued increases in private and industrial development can be expected, particularly adjacent to and in the river flood plain. Consequently, additional public user restrictions can be expected in the form of increasingly limited access, higher user costs for recreation privileges, or both.

The gradual, nearly irretrievable, long-term resource loss resulting from no action would increase the cost to future generations for quality outdoor recreation opportunities. Increased public expenses would also occur in the form of recurrent flood rehabilitation costs if development within the flood plain is allowed to continue unchecked.

Alternative II - Information Management - The objective of this alternative is to establish a managing/coordinating agency with visitor contact facilities for orientation and information purposes. The managing agency would function primarily as a coordinating agency with little actual responsibility for facility or site management.

In order to maintain as much control as possible, the managing agency would be responsible for coordination and protection along 75 miles of the scenic and recreational river involving approximately 15,000 acres within the boundary zone. An "immediate visual corridor" served as the basis for the rationale in determining the protection zone. Full title acquisition would be limited to a total of approximately 35 acres of ends of the river segment, providing for development of public contact and information centers. Nearly the entire proposed

TABLE 6

## COMPARISON SUMMARY: SPATIAL ALTERNATIVES AND MANAGEMENT OPTIONS

COMPARISON FACTORS	ALTERNATIVE I No Action	ALTERNATIVE II Information Management	ALTERNATIVE III Strip Management	ALTERNATIVE IV Control Management	ALTERNATIVE V Different Segments	
Objective	No change of the existing conditions. Development will continue at current pace	Minimum cost and minimum control with coordinative responsibility	Increase in control and management responsibility	Least long range cost with total control and optimum site development	Proposal-type protection boundaries and control. Reduction in segment lengths and site developments	
Corridor Protection						
Land Acquisition (acres)						
Full Title	None	35	4,000	6,000	400	400
Scenic Easements		14,965	11,000	9,000	----	----
Land Use Controls		---	----	----	49,600	64,600
Total Protection Zone		<u>15,000</u>	<u>15,000</u>	<u>15,000</u>	<u>50,000</u>	<u>65,000</u>
River Segment Length (miles)	None	75	75	75	51	65
Facility Sites (number)	20	22	22	22	19	20
5-Year Cost Estimates ('75\$)						
Land Acquisition	None	15,600,000	23,700,000	28,000,000	900,000	900,000
Development		<u>1,600,000</u>	<u>1,600,000</u>	<u>1,600,000</u>	<u>1,400,000</u>	<u>1,500,000</u>
Total		<u>17,200,000</u>	<u>25,300,000</u>	<u>29,600,000</u>	<u>2,300,000</u>	<u>2,400,000</u>
Operation and Maintenance		700,000	700,000	700,000	600,000	650,000

## MANAGEMENT OPTIONS

1. Local
2. Bi-State
3. Delaware River Basin Commission
4. Federal

management component would be placed under scenic easement protection, local zoning or special use agreements. The administering agency would serve as a coordinator of proper land use, and function as retainer of the land protection packages. Private residences and commercial services could retain ownership of the land as it presently exists, but subject to the negotiated protective blanket of easements and/or other land use regulations.

Only a very minor effect on the environment would occur as a result of the fee acquisition of the lands proposed. No significant development is planned for any of the acquired or easement protected lands. Consequently, no significant amounts of soil, vegetation or wildlife should be disturbed by this small scale proposal.

1975 cost estimates:

land acquisition	\$15,600,000
development	<u>1,600,000</u>
Total	\$17,200,000
operation and maintenance	\$ 700,000

Alternative II -- Strip Management - This alternative increases the managing agency's scope of responsibility. Its primary purpose is to strengthen the protection of the resources and facilities available for outdoor recreation use.

Although the proposed river management boundary would remain the same as Alternative II, (approximately 15,000 acres), the number of acres to be acquired in fee title would be increased to about 4,000. The remaining lands would be placed under scenic, easements, local zoning, or special use agreements for adequate protection. This amount of full title acquisition would allow the managing agency fee control of a 200-foot strip of land along both sides of the river for the entire length of the study segment.

The impact of the proposal on the environment would be minimal. No significant adverse effects are anticipated on ecological systems, or the general land use pattern as a result of the proposed land acquisition. Because full title land control is increased in this alternative, there would be more protection to the environmental quality.

1975 cost estimates:

land acquisition	\$23,700,000
development	<u>1,600,000</u>
Total	\$25,300,000
operation and maintenance	\$ 700,000

Alternative IV - Control Management - The concept of this alternative is directed toward the goals of preserving and protecting the river environment while providing suitable outdoor recreation facilities for appropriate visitor use and enjoyment of the river at the least long-term cost to the public.

As with other alternatives, the proposed boundary encompasses approximately 15,000 land acres. Under this alternative, it is estimated that approximately 6,000 acres would be purchased in fee. Scenic easements and adequately enforced zoning or use agreements are recommended for the remaining 9,000 acres.

The impact of the proposal on the environment would be minimal. No significant adverse effects are anticipated on ecological systems, or the general land use pattern as a result of the proposed land acquisition. Minor adverse effects are anticipated due to construction of the additional visitor use facilities in the river area.

1975 cost estimates:

land acquisition	\$28,000,000
development	<u>1,600,000</u>
Total	\$29,600,000
operation and maintenance	\$ 700,000

Alternative V - Different Segments - Under this alternative, two boundary changes which would reduce the size of the proposed scenic and recreational river have been considered.

1. The Upper Delaware from Hancock, N.Y. to Westcolang, Pa. -

Under this alternative, approximately 51 miles would be included in the national system. The protection boundary would contain a total of approximately 50,000 acres, of which 400 acres would be acquired in full title for facility sites and the remainder would come under zoning regulations.

Impacts from this alternative are expected to be substantially the same as those described for the proposal except almost one-third of the river suitable for recreation purposes would be excluded. The stretch below Westcolang contains many of the most important historic sites and some of the most adventurous canoeing waters. Exclusion of this stretch would result in more recreation pressure being exerted upon the scenic segments, making it more difficult to retain those segments as high quality environments. Impacts on resource uses and the environment of the 24-mile segment deleted from the proposal under this alternative would be similar to those described in the "No Action" alternative.

1975 cost estimates:

land acquisition	\$900,000
development	<u>1,400,000</u>
Total	\$2,300,000
operation and maintenance	\$ 600,000

2. The Upper Delaware River from Lordville, N.Y. to Matamoras, Pa. - Under this alternative, approximately 65 miles of the Upper Delaware would be included in the National System. The protection boundary would contain a total of approximately 65,000 acres. As with the other segment, 400 acres would be acquired in fee and the remainder would be regulated by zoning.

This alternative differs from the proposal in that the overall estimated capacity of the river for recreation activities such as canoeing would be reduced by about 10 percent. Approximately 25 percent of the prime trout fishing section would also be excluded. Regulation of the numbers of recreators using the river at any one time would become difficult, if not impossible, without coordinated recreation management along the uppermost section of the main stem. Impacts on resource uses and the environment of the ten mile stretch deleted from the proposal under this alternative would be similar to those described in the "No Action" alternative.

1975 cost estimates:

land acquisition	\$ 900,000
development	<u>\$1,500,000</u>
Total	\$2,400,000
operation and maintenance	\$ 650,000

#### Management Options

Several alternatives to manage the study segment exist. A discussion of the options listed below follows:

1. Local Management
2. Bi-State Management
3. Delaware River Basin Commission Management
4. Federal Management

Local Management - The Upper Delaware River could be afforded limited protection through the discretionary efforts of local governments. Land within the river corridor would remain in private ownership while uses would be controlled primarily by local zoning ordinances.

Local efforts to stabilize land and recreation use along the river would proceed with varying degrees of effectiveness and urgency. Zoning would be the primary land use regulation technique and many ordinances will probably be instituted only after extensive development along the river had already taken place. To offer complete protection to the Upper Delaware, these zoning ordinances would require intense coordination among at least 17 local governments in two states.

Bi-State Management - The Upper Delaware River serves as a border between the State of New York and the Commonwealth of Pennsylvania. Under this alternative, a bi-state agreement, such as the establishment of a Bi-State Park Commission, would provide for cooperative management of the river corridor. For such a commission to function properly, the States would have to be in essential agreement on the philosophy guiding scenic and recreational river designation and the strategy directing land use control and recreation facility development.

The States would administer the area as a component of their respective Wild and Scenic Rivers System and, upon application to the Secretary of the Interior, could have the river and its immediate environment added to the National System. The river would be permanently administered as a scenic and recreational river area, without cost to the Federal government. Neither State's Wild and Scenic Rivers Act currently provides funds for land acquisition, or operation and maintenance costs. Such funding would be necessary to properly manage the Upper Delaware River. The environmental impacts of Bi-State administration are expected to be similar to those under the proposal.

Delaware River Basin Commission Management - The Upper Delaware River is currently subject to various controls and coordination by the Delaware River Basin Commission. The Commission's Charter permits it to operate and manage land and resource facilities. Under this proposal, most of the land within the river corridor would remain in private ownership, subject to those controls imposed upon it by the Commission.

The major advantages of selecting the Delaware River Basin Commission as the managing agency are its current existence and its notable record as a coordinating body. Additionally, it has a broad base of representation and possesses the managing expertise, and associated administrative machinery, to effectively expand into a resource management role.

It is difficult to determine the precise impacts that implementation of this alternative would have. Probably the outcome would be similar to the proposal, except that adequate protection of the river corridor would depend on the creative implementation of the Delaware River Basin Commission's powers which have historically been used sparingly. Additional authority to regulate land use might also become necessary. This approach would require a considerable expansion of the Commission's traditional role, which has been oriented more toward water resources development than toward protection of the river corridor and provision of recreation opportunities.

Federal Management - Under this option, two feasible possibilities include: to Federally manage the river in the National System or incorporate it in the Delaware Water Gap National Recreation Area. Under legislative direction, the Secretary of the Interior could designate administration of the Upper Delaware River to the National

Park Service. The area could then be managed as a Federal component of the National Wild and Scenic Rivers System, with all responsibilities for planning, acquisition, development, and management of the river area assigned to the National Park Service.

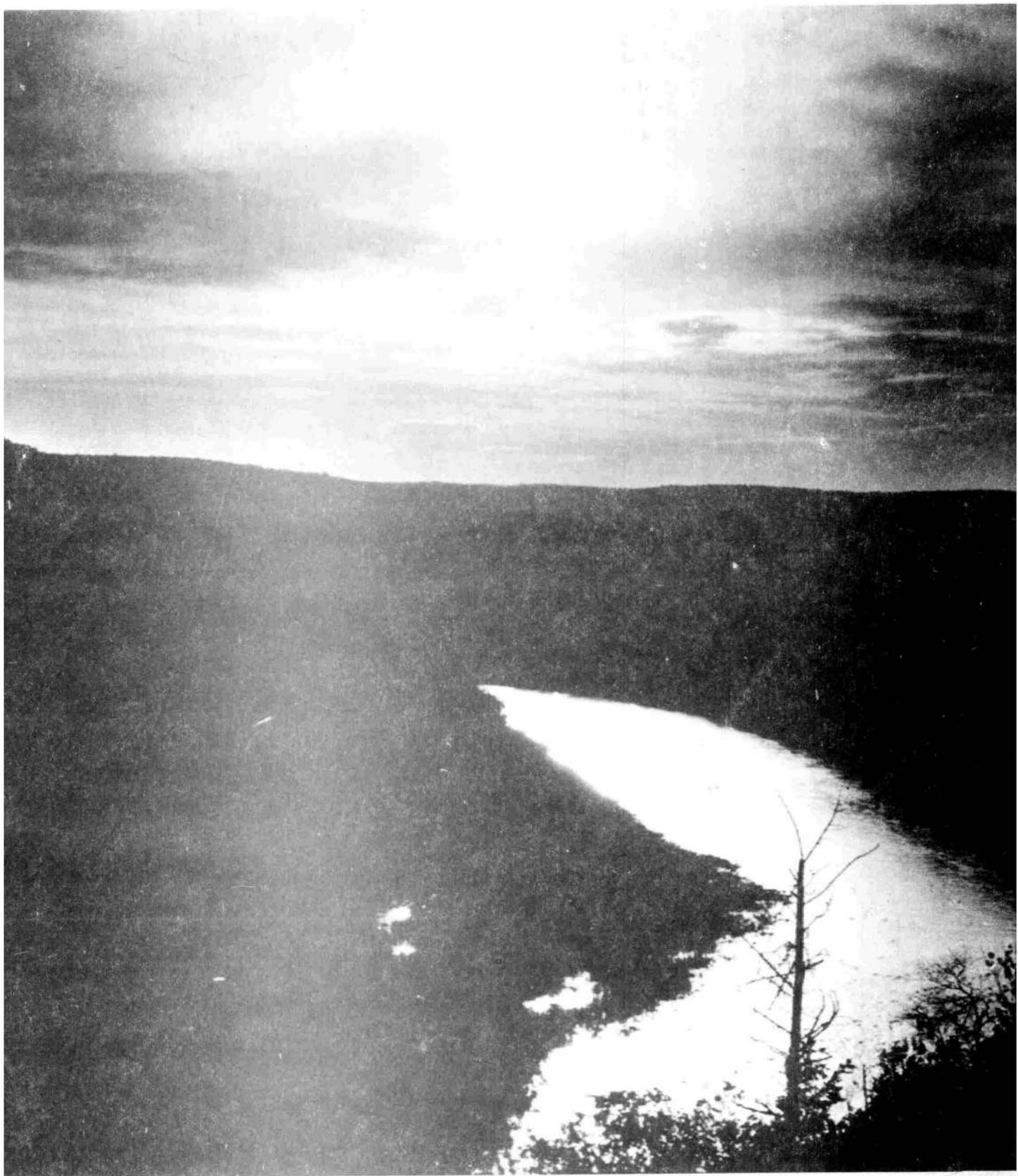
The primary advantages of this management alternative include the Park Service's record for effective coordination, the added emphasis of recognized national significance of the resource, and the inherent ability of a single agency to expedite the preservation and protection of the river's outstanding values.

Impacts of the Federal management option would be similar to the proposal. Under Federal management, the role of the National Park Service would be extended to include primary responsibility for land protection. This would result in a substantially larger Federal financial commitment, since full title and development right acquisitions would be greater than envisioned in the proposal. Recreation management and environmental protection objectives would probably not be significantly altered.

Rather than designate the Upper Delaware River as a component of the National System, it could be incorporated into the Delaware Water Gap National Recreation Area. This would result in a considerable addition to current and projected Federal land holdings in the area. The Delaware Water Gap National Recreation Area is designed for intensive, high-density recreation use, while the Upper Delaware is a resource which can best accommodate extensive low density recreation use. Insofar as the carrying capacity of typical Delaware Water Gap National Recreation Area lands exceeds that of the Upper Delaware, the potential for environmental damage to the river resulting from overuse is increased.

Environmental impacts of this option are considerable. Most of the land within the protection boundary would be acquired in full title by the Federal government. The potential for unsuitable commercial, industrial, or residential development would be eliminated. The managing agency could exercise strict control over land and water use. The social and economic impact would also be considered. Substantial disruption would occur since thousands of residents and numerous businesses would be required to relocate. Acquisition and relocation costs of the Federal government would be high.

# APPENDIX



## Upper Delaware River Supplemental Analysis

### 1. Purpose

This supplemental analysis provides a brief summary of various alternative plans for including a portion of the Upper Delaware River in the National Wild and Scenic Rivers System. Displays are provided which identify the effects of the various alternatives on three planning components (i.e. preserving a free-flowing river, providing quality recreation opportunities and diversity, and controlling land use in the river corridor). The quantitative and qualitative impacts of each component are arranged into four accounts, vis National Economic Development (NED), Environmental Quality (EQ), Social Well Being (SWB) and Regional Development (RD).

### 2. National Economic Development Objective Plan

Proposals for water resources utilization which would significantly and, for all practical purposes, irreversibly alter the potential uses of water and related land resources of an area, must consider alternatives which range from developing those resources for optimum national economic return to preserving and enhancing the natural environmental conditions. Similarly, the Principles and Standards planning procedures would be applied to proposals for wild, scenic and recreational rivers and national recreation areas when establishment of such areas would foreclose water resource development opportunity emphasizing national economic development.

Proposals to establish wild, scenic and recreational rivers and national recreation areas may not involve an irreversible commitment of resources over the long term or significant conflicts in the preferences of society for the utilization of water and related land resources of the area. Conflicts will be identified early in the planning process as a result of public involvement, review of previous studies of the area, and participation by other agencies on the planning team. In the absence of conflicts, planning would be for preservation of the natural values and enhancement of recreation opportunities. The range of alternative plans would relate only to the environmental quality objective. When plans would preclude potential future development of economic activities such as timber harvesting, mining, private recreation, or production of other goods and services, the values which would be enhanced, foreclosed, or curtailed by plan implementation will be identified in the appropriate accounts of alternative plans under the environmental quality objective.

A review of previous water planning efforts and coordination with water development agencies indicated that while several potential reservoir and/or pumped storage sites have been identified and studied, there are no known plans to develop any of them. A brief discussion of these sites can be found in the report under the sub-heading of Water Resource Development in Section II.

As a result of the review and coordination it has been determined that there is no conflicting demand for the water or plans for development. Consequently, there is no NED objective plan alternative which would meet the four tests.

3. The recommended plan would designate 75.4 miles of the Upper Delaware River from the confluence of the east and west branches to the town of Matamoras, Pennsylvania as a component of the National Wild and Scenic River System. Two segments totaling 25.1 mile would be classified as scenic and three segments totaling 50.3 miles would be classified as recreational. A corridor from ridge to ridge and totaling approximately 75,000 acres would be controlled primarily through local land use control measures such as zoning. The proposal envisions Federal acquisition of 450 acres with possible additional purchase of up to 1000 acres if necessary. The report also recommends that recreational management be administered by the National Park Service, that an Upper Delaware Citizen's Advisory Council be established to maximize public involvement, that water pollution abatement efforts be accelerated and that minimum instream flows of 1000 cfs, as measured at Hancock, New York, be maintained through releases from upstream reservoirs.

Alternatives to the proposal focus on various combinations of fee simple and scenic easement acquisition along with local zoning land control measures. In addition, two alternatives are given which would designate shorter segments as components of the National system.

DELAWARE RIVER  
NED ACCOUNT

COMPONENT	Without Plan Condition	Net Effect of Alternatives (Above or under "without plan" conditions)					
		Proposed Action	Information	Strip	Control	Different	
			Management	Management	Management	Segments	
Preserve free flowing river	Six conventional hydroelectric sites and one pumped storage site have been identified along with the study segment. There are no known plans to develop these sites, however future economic conditions could change so that development would be feasible.		Future hydroelectric development at 7 potential sites would be precluded by designation at the Delaware, from Hancock to Matamoras, as a component of the Wild and Scenic Rivers system.			Hancock to Westcolang:	Lordville to Matamoras:
						Eliminate 4 potential hydroelectric sites from further consideration.	Eliminate 7 potential hydroelectric sites from further consideration.
Provide quality recreation opportunities and diversity							
a) develop facilities	\$0	- \$1,600,000	- \$1,600,000	- \$1,600,000	- \$1,600,000	- \$1,400,000	- \$1,500,000
b) operation and maintenance (5 yrs)	\$0	- \$ 700,000	- \$ 700,000	- \$ 700,000	- \$ 700,000	- \$ 600,000	- \$ 650,000
Control land use in the river corridor through acquisition (fee simple and scenic easements) and land use control measures.	\$0	- \$1,000,000 (acquisition) <sup>1/</sup>	- \$15,600,000	- \$23,700,000	- \$28,000,000	- \$ 900,000	- \$ 900,000
	Commercial timber cutting continues to decline in importance. Agriculture may decline slightly. Vacation and second home development will continue to increase. NED benefits of these changes in land use have not been quantified.	- \$ 500,000 land use controls)					

<sup>1/</sup> NPS would be authorized to purchase an additional 1,000 acres (estimated value \$2,000,000) subject to approval of Upper Delaware Citizens Advisory Council.

DELAWARE RIVER  
EQ ACCOUNT

COMPONENT	Without Plan Condition	Net Effect of Alternatives (Above or under "without plan" conditions)					Different Segments	
		Proposed Action	Information Management	Strip Management	Control Management			
Preserve free flowing river	While both New York and Pennsylvania have state Wild & Scenic river legislation, there is no assurance that the Delaware will be included in either state system. The River's role as a boundary between the two states provides a focus for national interest in the Delaware.		The 76 miles of the upper Delaware River from the confluence of at the East and West Branches to Metamoras, Pennsylvania would be included in the Wild & Scenic River System. Three segments totaling 50.3 miles would be classified as recreational and two segments totaling 25.1 miles would be classified as scenic				Hancock to Westcolang;  Add 2 recreation segments totaling 26.5 miles and 2 scenic segment totaling 25.1 miles to National System.	Lordville to Metamoras;  Add 2 recreation segments totaling 40.5 miles and 2 scenic segments totaling 25.1 miles to National System.
Provide quality recreation opportunities and diversity	Focus of recreation opportunity will be on second home subdivision. Impacts of recreationists will result from overcrowding of public facilities.		Regulation of the number of persons using the resource at any one time will minimize environmental degradation. Increased visitor use can cause damage through overuse, littering, and disturbance of plant and animal life, however the adverse effects will be less severe than that expected from unregulated growth which will occur without plan implementation.					
Control land use in the river corridor through acquisition (fee simple and easements) and land use control measures.	No land acquired through fee simple or scenic easement. Zoning controls will become more restrictive but are likely to be uncoordinated and of limited effectiveness. Sites most desirable for recreation are expected to be among the first to be subdivided and developed for second homes.	Full title-450 acres  Scenic easements 0  Land use controls - 74,450 acres	Full title - 35 acres  Scenic easements - 14,965 acres  Land use controls 0	Full title - 4000 acres  Scenic easements - 11,000 acres  Land use controls 0	Full title - 6000 acres  Scenic easements - 9,000 acres  Land use controls 0	Full title - 400 acres  Scenic easements 0  Land use controls - 49,600 acres	Full title - 400 acres  Scenic easements 0  Land use controls - 64,600 acres	

**DELAWARE PLAN  
SWB ACCOUNT**

COMPONENT	Without Plan Condition	Net Effect of Alternatives (Above or under "without plan" conditions)				
		Proposed Action	Information Management	Strip Management	Control Management	Different Segments
Preserve free flowing river	Future availability of a high quality free flowing river resource is not assured.		Future availability of a high quality free flowing resource is assured.			
Provide high quality recreation opportunities and diversity						
a) Recreation use capacity	Recreation use of Upper Delaware will increase from present levels. Overcrowding and uncoordinated growth will degrade experience.		All alternatives provide for determination of an environmental sound carrying capacity during the master planning process. On a continuing five year basis, the use of the area will be reviewed to determine if overuse is occurring. Management practices would be altered accordingly.			
b) Number of facility sites (areas)	20	22 sites total	22 sites total	22 sites total	22 sites total	20 sites total
Control land use in the river corridor through acquisition (fee simple and scenic easements) and land use measures.	Land use decisions remain with local land owners.		Land use decisions would be influenced more by government than under, without plan conditions. Until land control measures have been instituted, all of the alternatives envision a temporary moratorium on development permits issued by the Delaware River Basin Commission.			
			An Upper Delaware Citizens Advisory Council would be established to encourage maximum public involvement in land use and recreation management processes. Members would represent counties along the designated segment of river and recreation use groups in general.			

DELAWARE RIVER  
RD ACCOUNT

COMPONENTS	Without Plan	Net Effect of Alternatives (Above or under "without plan" conditions)			
	Condition	Proposed Action	Information Management	Strip Management	Control Management
Preserve free flowing river					
Provide high quality recreation opportunity and diversity	Cost of emergency services continue at present trends			Cost of emergency services will rise as recreation use increases.	
Control land use in the river corridor through acquisition (fee simple and scenic easements) and land use control measures	Local property tax revenues would be unaffected.	Local property tax revenues would decline by \$66,000 per year. Loss is distributed among many municipalities so that no single municipality would be substantially impacted. New development in areas adjacent to the protected zone may offset the decline in local tax revenues.	Losses in local property tax revenues have not been estimated for these three alternatives, however they would be substantial since the alternatives would remove 16,000 acres in whole or in part (through various combination of fee simple and easement acquisition) from local tax roles.		Local property taxes would decline by approximately \$60,000. Loss is distributed among many municipalities.



STATE OF NEW YORK  
EXECUTIVE CHAMBER  
ALBANY 12224

T. N. HURD

SECRETARY TO THE GOVERNOR

April 22, 1974

Dear Mr. Secretary:

Governor Wilson has asked me to thank you for the opportunity to review and comment on the Department's proposed report on "The Upper Delaware River -- A Wild and Scenic River Study."

New York recognizes the urgent need for action on the Upper Delaware. Governor Rockefeller and the New York State Congressional Delegation encouraged inclusion of the Upper Delaware in the study program under the 1968 Wild and Scenic River Act and since that time we have consistently supported advancement of the project. As recommended in our State Outdoor Recreation Plan, the protection and enhancement of this resource should be given high priority, with the federal government playing a lead role.

We strongly support federal action to designate the Upper Delaware for inclusion in the national wild and scenic river system. We support, with equal enthusiasm, authorization by Congress of the development of a comprehensive management plan that will achieve the objectives of this program through coordinated federal, state, and local actions. We believe that management interests will be served best by placing the Upper Delaware under the administration of the National Park Service, and we strongly support establishment of a Citizens Advisory Council.

Additionally, after carefully considering the recommendations appearing on pages 19-22 of the study report, we suggest strengthening these proposals by modifying them in accord with the point-by-point comments prepared by Environmental Conservation Commissioner James Biggane and enclosed with this letter.

We appreciate your continued assistance and would like to thank the Task Force for the timely completion of this important work.

Sincerely,

A handwritten signature in black ink, appearing to read "T. W. Hurd". The signature is written in a cursive style with a large, looping initial "T".

Honorable Rogers C. B. Morton  
Secretary of the Interior  
19th and C Streets, N. W.  
Washington, D. C. 20240

Enclosure



COMMONWEALTH OF PENNSYLVANIA  
OFFICE OF THE GOVERNOR  
HARRISBURG

MILTON J. SHAPP  
GOVERNOR

March 18, 1974

The Honorable Rogers C. B. Morton  
Secretary  
U.S. Department of the Interior  
Washington, D. C. 20240

Dear Secretary Morton:

The opportunity to review and comment on the proposed report on the Upper Delaware River, Pennsylvania, as established by the National Wild and Scenic Rivers Act (82 Stat. 906), is sincerely appreciated.

Pennsylvania continues to endorse this project, specifically by utilization of Development Alternative II, with overall administration of this River segment by the National Park Service.

This river segment is situated in a critical area within close proximity to the eastern megalopolis and, therefore, deserves top priority for preservation by the National Park Service.

Please accept for yourself, and extend to all Task Force and staff members involved, my sincere thanks for your combined contributions to the advancement of this project.

Sincerely,

A handwritten signature in dark ink, appearing to read "Milton J. Shapp".

MILTON J. SHAPP  
Governor

Your File:  
D4219-Delaware River



OFFICE OF THE SECRETARY OF TRANSPORTATION  
WASHINGTON, D.C. 20590

MAY 13 1974

Honorable Douglas P. Wheeler  
Deputy Assistant Secretary of the Interior  
Washington, D.C. 20240

Dear Mr. Wheeler: *Long;*

This is in reply to your January 25, 1974, request to Secretary Brinegar, for comments on the Department of the Interior's proposal to include the Upper Delaware River in the Wild and Scenic Rivers System, pursuant to Public Law 90-542, Section 5(a)(6).

The proposed 75-mile segment of the Delaware River to be included in the system will be classified part scenic and part recreational. As pointed out in the Department of the Interior report, the river and its immediate environment possess outstanding scenic, recreational, fish and wildlife values, as well as geologic and archaeological-historic values. Further, the entire river is generally accessible by road and railroad. The railroad, which is usually well screened by vegetation, parallels the entire study segment.

We encourage the Department of the Interior to fully consider potential transportation improvement that may be necessary, or conflicts that may arise in connection with increased use by a substantial number of people from nearby metropolitan areas. We also recommend that there be continuing contact with the State and Federal agencies responsible for surface transportation facilities in the vicinity of the Upper Delaware River.

The Department of Transportation has no objection to the inclusion of the Upper Delaware River in the Wild and Scenic Rivers System. We appreciate the opportunity to comment on this report.

Sincerely,

A handwritten signature in cursive script, appearing to read "Marty", is written over the typed name.

Martin Convisser, Director  
Office of Environmental Affairs  
Office of the Assistant Secretary  
for Environment, Safety, and  
Consumer Affairs

FEDERAL POWER COMMISSION  
WASHINGTON, D.C. 20426

IN REPLY REFER TO:

APR 22 1974

Honorable Rogers C. B. Morton  
Secretary of the Interior  
Washington, D.C. 20240

Reference: D4219 - Delaware River

Dear Mr. Secretary:

This is in reply to Deputy Assistant Secretary Wheeler's letter of January 25, 1974, transmitting for the Commission's comments, pursuant to the provisions of the Wild and Scenic Rivers Act, PL 90-542, the proposed report of your Department on the Delaware River, Pennsylvania and New York.

The cited report finds that the 75-mile segment of the Delaware River between Hancock, New York, and Matamoras, Pennsylvania, is suitable for inclusion in the National Wild and Scenic Rivers System. Three segments, totaling about 50 miles, are recommended for recreational designation and two segments, totaling 25 miles, are recommended for scenic designation. Management and protection of the river areas would extend from ridge to ridge.

The Federal Power Commission staff has reviewed available information on this segment of the Delaware River to determine the effects of the recommended actions on matters affecting the Commission's responsibilities. Such responsibilities relate to the development of hydroelectric power and assurance of the reliability and adequacy of electric service under the Federal Power Act, and the construction and operation of natural gas pipelines under the Natural Gas Act.

The Commission staff review shows that there are no existing electric generating plants and no major transmission facilities within this reach of the Delaware River. The staff notes, however, that there are sites for the possible development of hydroelectric power. Sites on the Delaware River near Barryville and Narrowsburg, New York, could

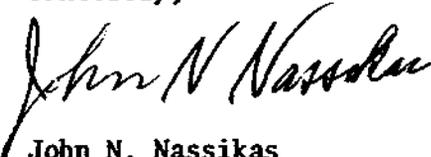
Honorable Rogers C. B. Morton  
Page 2

be developed to provide 29,700 and 15,000 kilowatts, respectively, of conventional hydroelectric capacity. The potential Delaware project on the Mongaup River, with 10,000 kilowatts of conventional capacity, would have its powerhouse located on this reach of the Delaware River. These sites were identified in the Corps of Engineers' comprehensive study of the Delaware River Basin, published in 1962 as House Document No. 522, 87th Congress, 2nd Session. Also, reconnaissance-type studies by the Commission staff indicate that a 2,000,000-kilowatt pumped storage project could be developed at Long Eddy, New York, on the Delaware River. There are no known plans for developing any of the above-mentioned projects or for constructing major power transmission lines to cross this reach of the Delaware River.

The staff notes that a natural gas pipeline, which is owned by the Columbia Gas Transmission Corporation and operated under the jurisdiction of the Federal Power Commission, crosses the river at a location apparently within the downstream segment recommended for recreational designation. Also, a small nonjurisdictional natural gas pipeline owned by Pike County Light and Power Company crosses this segment of the Delaware River. Any plans for managing the river should permit continued operation and maintenance of these facilities.

Based on its consideration of the proposed report of your Department and the studies of its own staff, the Commission concludes that the proposed scenic and recreational river designations of the upper Delaware River would conflict with the possible future development of hydroelectric capacity. It believes that the possible reservoir and power benefits foregone should be considered in deciding whether or not to include this reach of the river in the National Wild and Scenic Rivers System. It suggests also that the report of your Department discuss the gas pipeline river crossings.

Sincerely,



John N. Nassikas  
Chairman



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
REGIONAL OFFICE  
CURTIS BUILDING, SIXTH AND WALNUT STREETS  
PHILADELPHIA, PENNSYLVANIA 19106

REGION III

APR 30 1974

IN REPLY REFER TO:  
39E

Mr. Rogers C. B. Morton  
Secretary  
U.S. Department of the Interior  
Washington, D.C. 20240

Re: D4219-Delaware River

Dear Mr. Morton:

We have reviewed the Wild and Scenic River Study for the Upper Delaware River which was referred to us for response by our Headquarters Office. Our comments, which follow, relate to those recommendations of the report which deal with administration and land use management.

Of particular interest to us is the reliance which the study places upon local government to implement components of a land use guidance system--particularly zoning. While HUD encourages local communities to enact zoning and other land use control measures, we do not agree with the report's emphasis upon local government zoning in this instance, given the objectives to be achieved. The study report notes, at one point, that zoning, as the sole means of administratively protecting an area, can be legally and politically fragile, but that in certain instances, local zoning ordinances can be an effective means of protection. The history of zoning demonstrates, quite well, that as a device for permanently protecting scenic or other open space qualities of an area, zoning is generally inappropriate inasmuch as the local ability to withstand pressures for zoning change is invariably poor. Consequently, even if used in a limited fashion as proposed, we should expect pressures for change to build up in those locations where zoning would be the only form of control.

The recommendation that the land use management process should begin with the enactment and enforcement of strong zoning ordinances by local governments seem to fly in the face of prevailing experience and everything we know about the limitations of local zoning. Regardless of how technically adequate and thorough a zoning ordinance may be, enforcement of such ordinances in rural communities such as those comprising the study area, is frequently far from adequate. Moreover, there is no way to assure a constant and stable zoning policy. Local governing bodies and planning commissions experience frequent changes

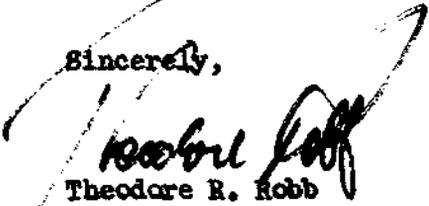
in membership which can give rise to land use policy changes. If local zoning has a role to play, it can realistically be only as an interim, short-term measure in connection with a broader strategy which depends solely on the use of such long-term measures as conservation and scenic easements, use agreements, etc.

As regards the role of the Delaware River Basin Commission (DRBC), it is our view that should Land Use Management recommendations continue to stress local zoning, the major coordinative role should be vested in the States rather than the DRBC. We concur in the recommendation to have DRBC assume a leading role in the Land Use Management process by developing a land use guidance system for the Upper Delaware; however, consistent with our view that the States should have the major coordinative role, we consider it more appropriate for DRBC to relate to them rather than to individual local governments.

Finally, while acknowledging the need, we doubt whether either the State of New York or the Commonwealth of Pennsylvania can adopt even a temporary moratorium on further subdivision within the protection boundary until adequate zoning or an adequate land use guidance system is established (Recommendation 8). Aside from the issue of the basic authority to establish a moratorium, especially where public health is probably not a factor, the recommendation would appear to also put the States in a position of determining, as a condition for lifting the moratorium, whether zoning or other effective land use controls instituted by the local government unit were "sufficient to protect the river environment". Our knowledge of Pennsylvania would suggest that this superior relationship of the State to a local governmental unit, does not exist with respect to the enactment of zoning controls.

We appreciate the opportunity to comment on the Upper Delaware Study, and will be glad to respond to any questions you may have on the points we have raised.

Sincerely,



Theodore R. Robb  
Regional Administrator



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
WASHINGTON, D.C. 20410

FEB 28 1974

OFFICE OF THE ASSISTANT SECRETARY  
FOR COMMUNITY PLANNING AND DEVELOPMENT

IN REPLY REFER TO:

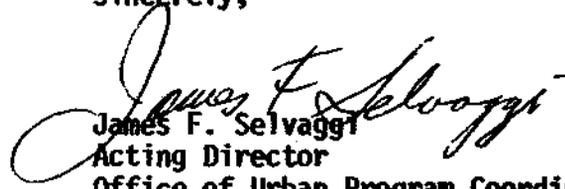
Honorable Douglas P. Wheeler  
Deputy Assistant Secretary for  
Fish, Wildlife and Parks  
Department of the Interior  
Washington, D. C., 20240

Dear Mr. Wheeler:

Your letter to Secretary Lynn of January 25, 1974, requesting HUD's comments on the proposed wild and scenic rivers report of the Upper Delaware River has been referred to our Philadelphia Regional Office for review and response.

We appreciate your informing the Department of such proposals; however, since this is a project level activity, we believe it will receive more expeditious handling by the Regional Administrator, Mr. Theodore R. Robb, in our Philadelphia Region under whose jurisdiction the project is to be located. This procedure will expedite the review of any such future reports.

Sincerely,

  
James F. Selvaggi  
Acting Director  
Office of Urban Program Coordination



DEPARTMENT OF AGRICULTURE  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C. 20250

June 6 1974

Honorable Rogers C. B. Morton  
Secretary of the Interior

Dear Mr. Secretary:

This is in response to Deputy Assistant Secretary Wheeler's January 25 letter requesting our review and comment on your Department's proposed report on the Delaware River.

We would have no objection to the report recommendation that the segment of the Delaware studied pursuant to the Wild and Scenic Rivers Act, should be made a component of the national system. We do wish to point out, however, that the report discussion of the economic effects, if the proposal matures, is rather abbreviated. This is especially so in the area of values foregone, or curtailed under the four action management alternatives. Although the report identifies some costs and some economic benefits, the overall net effects of implementing the proposal are not shown.

On balance, the proposal to include the Delaware in the National Wild and Scenic Rivers System has merit. Its location makes it readily available to large numbers of urban residents, and it offers a type of recreation experience generally lacking in populous areas. There is no apparent conflict between the proposed designation and plan of the river, and programs or projects of this Department. In the event the Delaware does become a component of the national system, there are programs in Agriculture which can enhance and contribute to management objectives for the river. The programs primarily relate to resolution of land use and agriculture-related pollution problems, especially on farmlands peripheral to the river boundaries.

We appreciate the opportunity to review your proposed report.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert W. Long".

Robert W. Long  
Assistant Secretary for Conservation,  
Research and Education



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

APR 18 1974

OFFICE OF  
AIR AND WATER PROGRAMS

Mr. Douglas P. Wheeler  
Deputy Assistant Secretary  
Department of the Interior  
Washington, D.C. 20240

Dear Mr. Wheeler:

The Administrator, Mr. Russell E. Train, has asked me to respond to your letter requesting our comments and views on the final Upper Delaware River Wild and Scenic River Study Report.

The report is well written and provides a complete analysis of the present and future conditions of the river study area. Although present water quality in some areas is a problem which creates localized high concentrations of coliform bacteria and, as a result of reservoir releases, extreme temperature variations occur, we agree that the existing intrinsic and extrinsic characteristics overwhelmingly favor the inclusion of the Upper Delaware River in the National Wild and Scenic Rivers System.

We support the recommendation and conclusion that the Upper Delaware River between Hancock, New York, and Matamoras, Pennsylvania, qualifies for inclusion in the national rivers system according to the following classifications:

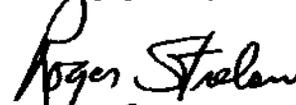
1. Recreational - Confluence of East and West Branches to 1/2 mile below Lordville, New York (9.8 miles)
2. Scenic - One half mile below Lordville to 1 1/4 miles above Callicoon, New York (15.8 miles)
3. Recreational - One and one quarter miles above Callicoon to the lower limits of Narrowsburg, New York (16.7 miles)

4. Scenic - Lower limits of Narrowsburg to 1 mile below Westcolong, Pennsylvania (9.3 miles)
5. Recreational - One mile below Westcolong to Matamoras, Pennsylvania (23.8 miles)

In the past EPA has had the opportunity to comment upon the study reports and accompanying draft environmental impact statement. This procedure has facilitated EPA's coordination and compliance with the National Environmental Policy Act of 1969. It is our understanding that the Upper Delaware River Draft Environmental Impact Statement will not be completed for several weeks. Although we anticipate no problems in this regard, we must reserve the right to alter our above comments after we have had an opportunity to review the Environmental Impact Statement.

We appreciate the opportunity to comment on this report and look forward to reviewing and commenting upon the Draft Environmental Impact Statement.

Sincerely yours,



Roger Strelow

Acting Assistant Administrator  
for Air and Water Programs



DEPARTMENT OF THE ARMY  
WASHINGTON, D.C. 20310

9 APR 1974

Mr. A. Heaton Underhill  
Assistant Director for  
State Programs and Studies  
Bureau of Outdoor Recreation  
Department of the Interior  
Washington, D. C. 20240

Dear Mr. Underhill:

This is in response to a recent letter (D4219-Delaware River) from Deputy Assistant Secretary Wheeler requesting our views and comments on your proposed report on addition of 75.4 miles of the Upper Delaware River, New York and Pennsylvania, to the National Wild and Scenic River System.

These comments are furnished pursuant to Section 4(b) of the Wild and Scenic Rivers Act, PL 90-542.

The report is not clear as to the exact downstream limits of the proposal. This matter should be resolved since, as you know, the towns of Matamoras and Port Jervis will be protected by river front levees authorized as a part of the Tocks Island Lake project.

While no environmental impact statement was provided for our review, we presume that such a document will be prepared should this report serve as the basis for legislation. Unless significant changes would be made in your proposed report as the result of other agencies' comments, it will be unnecessary to submit the draft EIS for review by the Department of the Army.

Subject to the above noted comments concerning the authorized levee works at Matamoras and Port Jervis, the Department of the Army has no objection to the proposal.

We appreciate the opportunity afforded us to provide our views on your proposed report, and hope that these comments will be helpful to you in perfecting your report.

Sincerely,

Charles R. Ford  
Chief  
Office of Civil Functions